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BARRE, F., CHAULIAC, CH., NOEL, B., Calculation of LOFT L3-5 experiment with CATHARE *[CEA, CEN, DRN, DTP, STR, Grenoble, France]*

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STÄDTKE, H., WORTH, B., KOLAR, W., RELAP5 assessment with LOBI small-break LOCA test results *[Commiss. European Communities, Euratom, Joint Res. Ctr., Ispra, Italy]*

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AGEE, L.J., MCFADDEN, J.H., PAULSEN, M.P., PETERSON, C.E., RETRAN's improved small break modeling capability *[Elect. Power Res. Inst., Palo Alto, CA, USA; Energy Inc., Idaho Falls, ID, USA]*

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KIM, S.N., GRIFFITH, P., PWR pressurizer modeling *[Korea Power Engn. Co., Seoul, South Korea; MIT, Cambridge, MA, USA]*

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LEE, N., Limiting countercurrent flow phenomenon in small break LOCA transients *[Westinghouse Elect. Corp., Pittsburgh, PA, USA]*

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ROSZTOCZY, Z.R., Emergency core cooling system-design considerations derived from small loss of coolant accidents *[US Nucl. Regulatory Commiss., Bethesda, MD, USA]*

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KUKITA, Y., NAMATAME, K., SHIBA, M., TAKESHITA, I., LOCA steam condensation loads in BWR MARK-II pressure suppression containment system *[Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan]*

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AUST, E., NIEMANN, H.R., SCHULTHEISS, G.F., Simulation of small break LOCA effects on BWR-pressure suppression systems *[Ges. Kernenergieverwertung Schiffbau & Schiffahrt GmbH, Geesthacht, Germany]*

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SUTRADHAR, S.C., CHANG, J.S., The role of interfacial friction on the shock-wave propagation in stratified gas-liquid flow inside pressure tubes *[McMaster Univ., Hamilton, Ontario, Canada]*

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BRINETTE, R., DOBMANN, G., DEUSTER, G., KATZENMEIER, G., On-line surveillance instrumentation for full scale thermal shock trials under real pressurized water conditions (German HDR-program) *[KFZ Karlsruhe GmbH, Karlsruhe, Germany; Univ. Saarbrücken, Fraunhofer Inst. Zerstörungsfreie Prüfverfahren, Saarbrücken, Germany]*

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THEINER, W.A., DEIMEL, P., Nondestructive testing of welds with the 3MA-analyzer *[Univ. Saarbrücken, Fraunhofer Inst. Zerstörungsfreie Prüfverfahren, Saarbrücken, Germany; Univ. Stuttgart, Staatliche Materialprüfungsanstalt, Stuttgart, Germany]*

Vol. 102 No. 3 (1987) 265-273
BEHRAVESH, M., AVIOLI, M., DAU, G., LIU, S.-N., Status of advanced UT systems for the nuclear industry *[Elect. Power Res. Inst., Palo Alto, CA, USA]*

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MIYOSHI, S., TANIMOTO, Y., UYAMA, K., SANO, Y., The evaluation of SCC defects of steel pipe using high-energy X-ray CT scanner *[Japan Power Engn. & Inspect. Corp., Tokyo, Japan; Toshiba Co. Ltd., Kawasaki, Kanagawa, Japan; Toshiba Co. Ltd., Tokyo, Japan]*

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GEHRHARDT, H.-J., EISENBLÄTTER, J., JAX, P., MAIER, H.-J., WASCHKIES, E., Experimental study on the application of acoustic emission during the hydraulic pressurization of a reactor pressure vessel *[Battelle Inst. eV, Frankfurt, Germany; Bundesminist. Umwelt Naturschutz & Reaktorsicherheit, Bonn, Germany; Fraunhofer Inst. Zerstörungsfreie Prüfverfahren, Saarbrücken, Germany; Siemens AG, KWU, Erlangen, Germany; Staatliche Materialprüfungsanstalt, Stuttgart, Germany]*

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KUSSMAUL, K., ETTEMEYER, A., Deformation analysis of a 900 MW reactor pressure vessel head by means of holographic interferometry *[Staatliche Materialprüfungsanstalt, Stuttgart, Germany]*

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ROYE, W., CROSTACK, H.-A., Profile- and deformation measurements with high axial resolution using the acoustical holography *[Univ. Dortmund, Dortmund, Germany]*

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DEUSTER, G., SCHMÜLLING, W., German NDE within PISC-II program *[Fraunhofer Inst. Zerstörungsfreie Prüfverfahren, Saarbrücken, Germany; Ges. Reaktorsicherheit GmbH, Cologne, Germany]*

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STEINMILL, H., KOCKELMANN, H., Crack depth measurements on fracture mechanics specimens by the ultrasonic amplitude modulation method *[Univ. Stuttgart, Staatliche Materialprüfungsanstalt, Stuttgart, Germany]*

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BOHN, H., RUTHROF, K., BARBIAN, O.A., KAPPES, W., NEUMANN, R., STANGER, H.-K., Apparative developments for inservice inspections of reactor pressure vessels *[Fraunhofer Inst. Zerstörungsfreie Prüfverfahren, Saarbrücken, Germany; Siemens AG, KWU, Erlangen, Germany]*

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DRESSLER, K., WERDEN, B., Experience with a universal ALOK ultrasonic testing system *[Tech. Überwachungsverein Rhein Westfal eV, Essen, Germany]*

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BOHN, H., KRÖNING, M., RATHGEB, W., GEBHARDT, W., KAPPES, W., BARBIAN, O.A., Proving the capabilities of the phased-array probe ALOK inspection technique *[Fraunhofer Inst. Zerstörungsfreie Prüfverfahren, Saarbrücken, Germany; Salzgitter Ind. Bau GmbH, Salzgitter, Germany; Siemens AG, KWU, Erlangen, Germany]*

Vol. 102 No. 3 (1987) 369-376
BÖTTGER, W., SCHNEIDER, H., WEINGARTEN, W., Prototype EMAT system for tube inspection with guided ultrasonic waves *[Mannesmann GmbH, Duisburg, Germany]*

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DALICHOW, M., HEUMÜLLER, R., KRÖNING, M., SCHMID, R., Crack depth measurements in stainless steel pipes – Methods and reliability *[Siemens AG, KWU, Erlangen, Germany]*

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DOCTOR, S.R., HALL, T.E., REID, L.D., MART, G.A., Application of real-time 3D SAFT in the TANDEM mode *[Battelle Mem. Inst., Pacific Northwestern Labs, Richland, WA, USA]*

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KUSSMAUL, K., FÖHL, J., ROOS, E., Some conclusions with regard to the safety assessment of cracked components drawn from the research program "integrity of components" (FKS II) at the present state *[Univ. Stuttgart, Staatliche Materialprüfungsanstalt, Stuttgart, Germany]*

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DARLASTON, B.J., GARDNER, W.E., Advances in PWR structural integrity assessment and materials technology in the United Kingdom *[Berkeley Nucl. Labs, Berkeley, Glos, England; UKAEA Technol., Warrington, Cheshire, England]*

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BELICZEY, S., SCHULZ, H., The probability of leakage in piping systems of pressurized water reactors on the basis of fracture mechanics and operating experience *[Ges. Reaktorsicherheit GmbH, Cologne, Germany]*

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ROOS, E., EISELE, U., SILCHER, H., SPAETH, F., The influence of the material toughness and the state of stress on fracture of large scale specimens *[Staatliche Materialprüfungsanstalt, Stuttgart, Germany]*

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DAHL, W., EHRHARDT, H., HEUSER, A., HUBO, R., TWICKLER, R., UWER, D., Determination of fracture mechanics properties of welded joints and comparison with the failure behaviour of wide plates *[Rhein Westfal TH Aachen, Aachen, Germany; Thyssen Stahl AG, Duisburg, Germany]*

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CASADEI, F., DELZANO, C., MAGONETTE, G., HALLEUX, J.P., VERZELETTI, G., Dynamic testing of large AISI 316-L steel specimens behaviour using LDTF *[Commiss. European Communities, Euratom, Joint Res. Ctr., Ispra, Italy]*

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ROOS, E., EISELE, U., BEYER, H., GILLOT, R., Classification and characterization of materials by means of fracture mechanics parameters *[Univ. Stuttgart, Staatliche Materialprüfungsanstalt, Stuttgart, Germany]*

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PACKEISER, R., AURICH, D., ZIEBS, J., Influence of loading rate on the crack resistance curve and the initiation temperature *[Bundesanstalt Materialprüfung, Berlin, Germany]*

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TSUKADA, H., SUZUKI, K., SATO, I., MIURA, R., Ultra-large size austenitic stainless steel forgings for a fast breeder reactor: Development, manufacturing and properties achieved *[Japan Steel Works Ltd., Muroran, Japan]*

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LEHR, G., Findings and perspectives of reactor safety research and its funding by the German Federal Ministry for Research and Technology (BMFT) *[Bundesminist. Forsch. & Technol., Bonn, Germany]*

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KUCZERA, B., RININSLAND, H., The Nuclear Safety Project at KfK 1972-1986 – Objectives and results *[KFZ Karlsruhe GmbH, Karlsruhe, Germany]*

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TANGUY, P., Safety experience on EDF's PWRs *[Elect. France, Paris, France]*

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ROSS, D.F., ERNST, M.L., MURPHY, J., Current perspectives on nuclear power plant risks and the use of risk-based information in regulation *[US Nucl. Regulatory Commiss., Washington, DC, USA]*

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ERBACHER, F.J., Cladding tube deformation and core emergency cooling in a loss of coolant accident of a pressurized water reactor *[KFZ Karlsruhe GmbH, Karlsruhe, Germany]*

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LEISTIKOW, S., SCHANZ, G., Oxidation kinetics and related phenomena of Zircaloy-4 fuel cladding exposed to high temperature steam and hydrogen-steam mixtures under PWR accident conditions *[KFZ Karlsruhe GmbH, Karlsruhe, Germany]*

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HAGEN, S., HOFMANN, P., LWR fuel rod behavior during severe accidents *[KFZ Karlsruhe GmbH, Karlsruhe, Germany]*

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SKOKAN, A., HOLLECK, H., The significance of chemical reactions between reactor materials under core melting conditions *[KFZ Karlsruhe GmbH, Karlsruhe, Germany]*

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ALSMEYER, H., BETA experiments in verification of the WECHSL code: Experimental results on the melt-concrete interaction *[KFZ Karlsruhe GmbH, Karlsruhe, Germany]*

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REIMANN, M., Verification of the WECHSL code on melt-concrete interaction and application to the core melt accident *[KFZ Karlsruhe GmbH, Karlsruhe, Germany]*

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WILHELM, J., Development and application of filters for air cleaning in nuclear power plants *[KFZ Karlsruhe GmbH, Karlsruhe, Germany]*

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WAKABAYASHI, T., MOCHIZUKI, H., MIDORIKAWA, H., HAYAMIZU, T., KITAHARA, T., Analysis of the Chernobyl Reactor Accident (I): Nuclear and thermal-hydraulic characteristics and follow-up calculation of the accident *[Power Reactor & Nucl. Fuel Dev. Corp., Oarai, Ibaraki, Japan]*

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ANG, M.L., AYTEKIN, A., FOX, A.H., Analysis of flow distribution in a PWR fuel rod bundle model containing a 90% blockage *[Loughborough Univ. Technol., Loughborough, Leics, England; Natl. Nucl. Corp. Ltd., Warrington, Cheshire, England]*

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AU-YANG, M.K., Development of stabilizers for steam generator tube repair *[Babcock & Wilcox Co., Lynchburg, VA, USA]*

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PREUMONT, A., PAY, A., DECAUWERS, A., The seismic analysis of a free standing FBR core (A case study - SNR-2 preliminary design *[Belgonucl SA, Brussels, Belgium]*

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LASSMANN, K., A fast and simple iteration scheme for the temperature calculation in a fuel rod *[European Inst. Transuranium Elements, Joint Res. Ctr., Karlsruhe, Germany]*

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LASSMANN, K., HOHLEFELD, F., The revised URGAP-model to describe the gap conductance between fuel and cladding *[European Inst. Transuranium Elements, Joint Res. Ctr., Karlsruhe, Germany]*

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KUMAMARU, H., SUZUKI, M., YONOMOTO, T., TASAKA, K., FINDLAY, J.A., SUTHERLAND, W.A., Similarity study of ROSA-III and FIST large break counterpart tests to BWR large break LOCA *[GE, San Jose, CA, USA; Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan]*

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YONOMOTO, T., KOIZUMI, Y., TASAKA, K., Core heat transfer analysis during a BWR LOCA simulation experiment at ROSA-III *[Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan]*

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KURIHARA, R., UEDA, S., MIYAZONO, S., Experimental and analytical studies of pipe whip tests under PWR LOCA conditions *[Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan]*

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VILLAVERDE, R., Simplified approach for the seismic analysis of equipment attached to elastoplastic structures *[Univ. Calif. Irvine, Irvine, CA, USA]*

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WATANABE, T., HIRANO, M., TANABE, F., Vapor generation model for flashing in the initial blowdown phase *[Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan]*

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SATO, S., AWAJI, H., KAWAMATA, K., KURUMADA, A., OKU, T., Fracture criteria of reactor graphite under multiaxial stresses *[Fukushima Natl. Coll. Technol., Iwaki, Japan; Ibaraki Univ., Hitachi, Ibaraki, Japan; Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan]*

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CONGLETON, J., PARKINS, R.N., HEMSWORTH, B., Stress corrosion cracking of Alloy 600 in high temperature water *[HM Nucl. Installat. Inspectorate, London, England; Univ. Newcastle upon Tyne, Newcastle upon Tyne, Tyne & Wear, England]*

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DESMOND, T.P., DERMITZAKIS, S.N., Effective-length factors for buckling of cable-tray supports *[Impell. Corp., Walnut Creek, CA, USA]*

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AHMED, K.M., The dynamic response of multi-layers AGR core brick arrays *[Natl. Nucl. Corp. Ltd., Knutsford, Cheshire, England]*

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KIM, I.S., MODARRES, M., Application of Goal Tree-Success Tree model as the knowledge-base of Operator Advisory Systems *[Univ. Maryland, College Park, MD, USA]*

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FENECH, H., BENNETT, F.O., Axial static pressure variations in inner and side subchannels of a 61-tube wire-wrap bundle *[GA Technol. Ind. Inc., La Jolla, CA, USA; Univ. Calif. Santa Barbara, Santa Barbara, CA, USA]*

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NINOKATA, H., EFTHIMIADIS, A., TODREAS, N.E., Distributed resistance modeling of wire-wrapped rod bundles *[MIT, Cambridge, MA, USA; Power Reactor & Nucl. Fuel Dev. Corp., Oarai, Ibaraki, Japan]*

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KUNIEDA, M., CHIBA, T., KOBAYASHI, H., Positive use of damping devices for piping systems - Some experiences and new proposals *[Ishikawajima Harima Heavy Ind. Co. Ltd., Tokyo, Japan; Ishikawajima Harima Heavy Ind. Co. Ltd., Yokohama, Kanagawa, Japan]*

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KOCAMUSTAFAOGULLARI, G., ISHII, M., Scaling of two-phase flow transients using reduced pressure system and simulant fluid *[Argonne Natl. Lab., Argonne, IL, USA; Univ. Wisconsin, Milwaukee, WI, USA]*

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TAKEDA, T., KAWAMURA, H., SEKI, M., Natural circulation in parallel vertical channels with different heat inputs *[Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan]*

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JEONG, J.J., NO, H.C., An improved numerical scheme with the fully-implicit two-fluid model for a fast-running system code *[Korea Adv. Inst. Sci. & Technol., Seoul, South Korea]*

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GOLD, R., MCELROY, W.N., Radiation-induced embrittlement in light water reactor pressure vessels *[Westinghouse Hanford Co., Richland, WA, USA]*

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HASEGAWA, M., ICHIKAWA, T., NAKAI, S., WATANABE, T., Nonlinear seismic response analysis of an embedded reactor building based on the substructure approach *[Shimizu Corp., Tokyo, Japan]*

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WAGENKNECHT, E., Response of a NPP reactor building under seismic action with regard to different soil properties *[Bauakademie DDR, Berlin, Germany]*

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SHROUKRI, M., CHAN, A.M.C., On the thermal analysis of pressure tube/calandria tube contact in CANDU reactors *[McMaster Univ., Hamilton, Ontario, Canada; Ontario Hydro, Toronto, Ontario, Canada]*

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ESPEFÄLT, R., GUNSELL, L., LÖWENHIELM, G., KAISER, G., FULFORD, P.J., Risk analyses of the Ringhals plants: Containment behaviour and filtered vent *[NUS Corp., Gaithersburg, MD, USA; Swedish State Power Board, Vallingby, Sweden]*

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SCHAUB, TH., HÄNNI, H.P., Containment integrity is a major part of KKL-safety systems PRA *[Kernkraftwerk Leibstadt AG, Leibstadt, Switzerland; Motor Columbus Ing. AG, Baden, Switzerland]*

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BRACHT, K., TILTMANN, M., Analysis of strategies for containment venting in case of severe accidents *[Ges. Reaktorsicherheit GmbH, Cologne, Germany]*

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CARCASSI, M., FINESCHI, F., LOMBARDI, G., Air-hydrogen deflagration tests at the University of Pisa *[CRN, Energia Nucl. & Energia Alternat., Pisa, Italy; Univ. Pisa, Pisa, Italy]*

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BENJAMIN, A.S., BOYD, G.R., MURFIN, W.B., KUNSMAN, D.M., Evaluation of uncertainties in risk emanating from a number of severe accident issues *[Safety & Reliabil. Optimizat. Serv., Knoxville, TN, USA; Sandia Natl. Labs, Albuquerque, NM, USA; Technadyne Engn. Consultants Inc., Albuquerque, NM, USA]*

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SAMMATARO, R.F., Preservice and inservice requirements for containment structures in the United States - A status-report *[Gen. Dynam. Corp., Div. Elect. Boat, Groton, CT, USA]*

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CARROLL, D.E., TILLS, J.L., VALDEZ, G.D., BERGERON, K.D., WILLIAMS, D.C., Integrated analysis of core debris interactions and their effects on containment integrity using the CONTAIN computer code *[Sandia Natl. Labs, Albuquerque, NM, USA]*

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KARWAT, H., Scaling and extrapolation of hydrogen distribution experiments *[Tech. Univ. Munich, Garching, Germany]*

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GASSER, R.D., BIENIARZ, P.P., TILLS, J.L., Containment response and radiological release for a TMLB accident sequence in a large dry containment *[Risk Management Assoc., Albuquerque, NM, USA; Sandia Natl. Labs, Albuquerque, NM, USA; Tills & Assoc., Albuquerque, NM, USA]*

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HINDY, A., DANAY, A., Plastic analysis of concrete containment structure *[Ontario Hydro, Toronto, Ontario, Canada]*

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HIBBITT, H.D., A simplified model for concrete at low confining pressures *[Hibbitt Karlsson & Sorensen Inc., Providence, RI, USA]*

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HANSON, N.W., SCHULTZ, D.M., ROLLER, J.J., TANG, H.T., Results of large-scale test of discontinuity region in a prestressed concrete containment *[Construct. Technol. Labs Inc., Skokie, IL, USA; Elect. Power Res. Inst., Palo Alto, CA, USA]*

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DAMERON, R.A., DUNHAM, R.S., RASHID, Y.R., TANG, H.T., Analytical correlation and interpretation of full scale containment specimen tests *[Anatech Int. Corp., La Jolla, CA, USA; Elect. Power Res. Inst., Palo Alto, CA, USA]*

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HORSCHEL, D.S., Construction of a 1/6-scale concrete containment model *[Sandia Natl. Labs, Albuquerque, NM, USA]*

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SHUNMUGAVEL, P., GURBUZ, O., An evaluation of structural failure modes for prestressed concrete containments *[Bechtel Western Power Corp., Norwalk, CA, USA]*

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EVANS, J.J.B., KEOGH, P.M., The influence of non-linearity and foundation behaviour on containment integrity *[Ove Arup & Partners, London, England]*

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ISOZAKI, T., SODA, K., MIYAZONO, S., Structural analysis of a Japanese BWR MARK-I containment under internal pressure loading *[Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan]*

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CLAUSS, D.B., Failure mechanisms of LWR steel containment buildings subject to severe accident loadings *[Sandia Natl. Labs, Albuquerque, NM, USA]*

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KRIEG, R., GÖLLER, B., MESSEMER, G., WOLF, E., Failure pressure and failure mode of the latest type of German PWR containments *[KFZ Karlsruhe GmbH, Karlsruhe, Germany]*

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BUI, H.D., VAN, K. DANG, Some recently developed analytical aspects of fracture mechanics *[Ecole Polytech., CNRS, Mecan. Solides Lab., Palaiseau, France; Elect. France, Div. R&D, Clamart, France]*

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PARKS, D.M., Mechanics and mechanisms of creep deformation and damage *[MIT, Cambridge, MA, USA]*

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CHABOCHE, J.L., Continuum damage mechanics: Present state and future trends *[Off. Natl. Etud. & Rech. Aerosp., Chatillon, France]*

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SEAMAN, L., CURRAN, D.R., AIDUN, J.B., COOPER, T., A microstatistical model for ductile fracture with rate effects *[SRI Int., Dept. Shock Phys. & Geophys., Poulter Lab., Menlo Park, CA, USA]*

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BILLARDON, R., MORET-BAILLY, L., Fully coupled strain and damage finite element analysis of ductile fracture *[Univ. Paris 06, Ecole Normale Super Cachan, CNRS, Mec. & Tech. L, Cachan, France]*

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ROSENFIELD, A.R., MAJUMDAR, B.S., Micromechanisms and toughness for cleavage fracture of steel *[Battelle Mem. Inst., Columbus, OH, USA]*

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HALIM, A., DORMAGEN, D., DÜNNEWALD-ARFMANN, H., TWICKLER, M., TWICKLER, R., DAHL, W., Application of micromechanical models for predicting fracture toughness of sulphide controlled Fe 510 steels *[Rhein Westfal TH Aachen, Aachen, Germany]*

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MUDRY, F., A local approach to cleavage fracture *[Ecole Mines Paris, Paris, France]*

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FONTAINE, A., MAAS, E., TULOU, J., Prevision of the cleavage fracture properties using a local approach: Application to the welded joint of a structural C-Mn steel *[Inst. Rech. Siderurgie Francaise, St. Germain en Laye, France]*

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SAILLARD, P., DEVAUX, J.C., PELLISSIER-TANON, A., Numerical prediction of the fracture of a thick pressurized shell subjected to a liquid nitrogen shock *[Framatome France, Paris, France; Framatome France, St. Marcel, France]*

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AMAR, E., PINEAU, A., Application of a local approach to ductile-brittle transition in a low-alloyed steel *[Ecole Mines Paris, CNRS, Ctr. Mat., Evry, France]*

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ROUSSELIER, G., Ductile fracture models and their potential in local approach of fracture *[Elect. France, Dept. Nucl. Reactors & Heat Exchangers, Moret sur Loing, France]*

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BATISSE, R., BETHMONT, M., DEVESA, G., ROUSSELIER, G., Ductile fracture of A 508-Cl-3 steel in relation with inclusion content: The benefit of the local approach of fracture and continuum damage mechanics *[Elect. France, Dept. Nucl. Reactors & Heat Exchangers, Moret sur Loing, France]*

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OTSUKA, A., TOHGO, K., OKAMOTO, Y., Relationship between ductile crack initiation and void volume fraction *[Nagoya Univ., Nagoya, Aichi, Japan]*

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DEVAUX, J.C., MOTTET, G., BALLADON, P., PELLISSIER-TANON, A., Calibration of the parameters of a ductile fracture damage model on an austenitic-ferritic duplex welded joint *[Framatome France, Paris, France; Framatome France, St. Marcel, France]*

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MASSON, J.C., Use of local approach for predicting fatigue cracks in sleeves subjected to repeated thermal shocks *[Elect. France, Dept. Nucl. Reactors & Heat Exchangers, Moret sur Loing, France]*

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BUI, H.D., VAN, K. DANG, DE LANGRE, E., A simplified analysis of creep crack growth using local approach *[CEA, CEN, IPSN, DERS, St. Paul les Durance, France; Ecole Polytech., CNRS, Mecan. Solides Lab., Palaiseau, France; Elect. France, Div. R&D, Clamart, France]*

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FLETCHER, C.D., CHAMBERS, R., BOLANDER, M.A., DALLMAN, R.J., Simulation of the Chernobyl accident *[EG&G Idaho Inc., Idaho Natl. Engn. Lab., Idaho Falls, ID, USA]*

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HANADA, K., IWATATE, T., SAWADA, Y., EZURE, H., Soil-structure interaction of "JPDR" based on earthquake observations and forced vibration tests *[Cent. Res. Inst. Elect. Power Ind., Abiko, Chiba, Japan; Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan]*

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WITTMANN, F.H., ROELFSTRA, P.E., KAMP, C.L., Drying of concrete: An application of the 3L-approach *[Swiss Fed. Inst. Technol., Lausanne, Switzerland]*

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REYNOLDS, A.B., BRADLEY, D.R., KU, J.Y., WEBB, R.L., The UVABUBL program and its application to the FAST underwater tests *[Univ. Virginia, Charlottesville, VA, USA]*

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GRIFFITH, P., MOHAMAD, J.A., BROWN, D., Dryout front modeling for rod bundles *[Argentine Navy, Buenos Aires, Argentina; MIT, Cambridge, MA, USA; United Technol. Corp., Norwich, CT, USA]*

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VISKANTA, R., MOHANTY, A.K., Heat-up of a partially uncovered PWR fuel rod in the presence of cladding oxidation and steam dissociation *[Purdue Univ., West Lafayette, IN, USA]*

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JAMES, L.A., The fatigue-crack propagation behaviour of ASTM A533-B steel tested in vacuo at LWR operating temperatures *[Westinghouse Elect. Corp., Bettis Atom Power Lab., West Mifflin, PA, USA]*

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CHELLAIAH, S., VISKANTA, R., RANGANATHAN, P., ANAND, N.K., Analysis of core and core barrel heat-up under conditions simulating severe reactor accidents *[Purdue Univ., West Lafayette, IN, USA]*

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KASTNER, W., RIPPEL, R., Jet impingement forces on structures - Experiments and empirical calculation methods *[Siemens AG, KWU, Erlangen, Germany]*

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WAZZAN, A.R., PROCACCIA, H., DAVID, J., FROMAL, A., PITNER, P., Thermal-hydraulic characteristics of pressurized water reactors during commercial operation: VII. Thermal-hydraulics of the PWR Paluel 1 steam generator during commercial operation *[Elect. France, St. Denis, France; Univ. Calif. Los Angeles, Los Angeles, CA, USA]*

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TAPUCU, A., GEÇKINLI, M., GIRARD, R., Experimental investigation of mass exchanges between two laterally interconnected two-phase flows *[Ecole Polytech., Montreal, Quebec, Canada; New Brunswick Power, Fredericton, NB, Canada; Tech. Univ. Istanbul, Istanbul, Turkey]*

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FLETCHER, D.F., The particle size distribution of solidified melt debris from molten fuel–coolant interaction experiments *[UKAEA Technol., Culham Lab., Culham, Oxon, England]*

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VIDIL, R., GRAND, D., LEROUX, F., Interaction of recirculation and stable stratification in a rectangular cavity filled with sodium *[CEA, CEN, DRN, DTP, STR, Grenoble, France]*

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HUSSEIN, E.M.A., Modelling and design of a neutron scatterometer for void-fraction measurement *[Univ. New Brunswick, Fredericton, NB, Canada]*

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SALCUDEAN, M.E., LEUNG, L.K.H., Two-phase pressure drop through obstructions *[Univ. British Columbia, Vancouver, BC, Canada; Univ. Ottawa, Ottawa, Ontario, Canada]*

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LIM, J.C., WEISMAN, J., A phenomenologically based prediction of rod-bundle dryout *[Univ. Cincinnati, Cincinnati, OH, USA]*

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THEOFANOUS, T.G., The cooldown aspects of the TMI-2 accident *[Univ. Calif. Santa Barbara, Santa Barbara, CA, USA]*

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LAURA, P.A.A., BERGMANN, A., CORTINEZ, V.H., Steady state temperature distribution in a circular corrugated domain with heat generation in the inner core *[Empresa Nucl. Argentina Cent. Electr. SA, Buenos Aires, Argentina; Inst. Appl. Mech., Puerto Belgrano, Argentina; Univ. Nacl. Sur, Bahia Blanca, Argentina]*

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BAZANT, Z.P., PRAT, P.C., Measurement of Mode III fracture energy of concrete *[Northwestern Univ., Evanston, IL, USA]*

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CHANG, H.S., BELYTSCHKO, T., Multi-scattering and boundary effects in soil-structure interaction *[Northwestern Univ., Evanston, IL, USA]*

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CHANG, Y.W., MA, D.C., GVILDYS, J., LIU, W.K., Seismic analysis of LMR reactor tanks *[Argonne Natl. Lab., Argonne, IL, USA; Northwestern Univ., Evanston, IL, USA]*

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GÖLLER, B., KRIEG, R., MESSEMER, G., WOLF, E., Failure pressure and failure mode of the bolted connection for the large component port in German PWR containments *[KFZ Karlsruhe GmbH, Karlsruhe, Germany]*

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KULAK, R.F., FIALA, C., NEPTUNE: a system of finite element programs for three-dimensional nonlinear analysis *[Argonne Natl. Lab., Argonne, IL, USA]*

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MARCHERTAS, A.H., KENNEDY, J.M., PFEIFFER, P.A., Reinforced flexural elements for TEMP-STRESS program *[Argonne Natl. Lab., Argonne, IL, USA]*

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MARTELLI, A., FORNI, M., MASONI, P., MARESCA, G., CASTOLDI, A., MUZZI, F., Research and development studies on plant and core seismic behaviour for a fast reactor *[Ansaldo S.p.A., Genoa, Italy; European Nucl. Energy Agcy., Bologna, Italy; Ismes S.p.A., Bergamo, Italy]*

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WANG, C.-Y., Analysis of primary containment response using an arbitrary Lagrangian-Eulerian method *[Argonne Natl. Lab., Argonne, IL, USA]*

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WANG, C.-Y., A numerical algorithm for analyzing piping response to thermal transients and seismic excitations *[Argonne Natl. Lab., Argonne, IL, USA]*

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WAKABAYASHI, T., HAYAMIZU, Y., KITAHARA, T., Analysis of the Chernobyl Reactor Accident (II): An examination of the improvement measures concerning the accident of the Chernobyl power plant *[Power Reactor & Nucl. Fuel Dev. Corp., Oarai, Ibaraki, Japan]*

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SOBAJIMA, M., FUJISHIRO, T., Examination of the destructive forces in the Chernobyl accident based on NSRR experiments *[Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan]*

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VONKA, V., Measurement of secondary flow vortices in a rod bundle *[Netherlands Energy Res. Fdn., Petten, Netherlands]*

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VONKA, V., Turbulent transports by secondary flow vortices in a rod bundle *[Netherlands Energy Res. Fdn., Petten, Netherlands]*

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SHIN, Y.W., WIEDERMANN, A.H., EICHLER, T.V., YOUNGDAHL, C.K., OCKERT, C.E., An analytical model for dynamics of a sodium/water reaction bubble in an LMFBR steam generator and the coupled response of the intermediate heat transport system *[Argonne Natl. Lab., Argonne, IL, USA; Devry Inst. Technol., Lombard, IL, USA; IIT, Res. Inst., Chicago, IL, USA; US DOE, Germantown, MD, USA]*

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MUELLER, G.E., Analytical solution for the transient thermal response of volumetrically heated fixed porous nuclear debris beds *[Univ. Missouri, Rolla, MO, USA]*

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ZAHOOR, A., Ductile fracture mechanics methodology for complex cracks in nuclear piping *[Novetech Corp., Rockville, MD, USA]*

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ISOZAKI, T., MIYAZONO, S., Temperature increase on target due to jet impingement under BWR/PWR loss of coolant accident conditions *[Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan]*

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KURIHARA, R., UEDA, S., STURM, D., Estimation of the ductile unstable fracture of pipe with a circumferential surface crack subjected to bending *[Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan; Univ. Stuttgart, Staatliche Materialprüfungsanstalt, Stuttgart, Germany]*

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GOSH, A.K., On site specific design response spectra *[Bhabha Atom Res. Ctr., Bombay, India]*

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LASSMANN, K., BLANK, H., Modelling of fuel rod behaviour and recent advances of the TRANSURANUS code *[European Inst. Transuranium Elements, Joint Res. Ctr., Karlsruhe, Germany]*

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KNOCH, P., GERTKEMPER, H., MAIER, H.-J., ZB2-tests – Description of the intermediate size vessel and AE results *[Univ. Stuttgart, Staatliche Materialprüfungsanstalt, Stuttgart, Germany]*

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MOHANTY, A.K., SAHOO, K.M., Turbulent flow and heat transfer in rod-bundle subchannels *[Indian Inst. Technol., Dept. Mech. Engn., Kharagpur, West Bengal, India]*

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WERKLE, H., WAAS, G., Response of NPP structures to simultaneously acting air pressure loads and ground waves caused by a gas cloud explosion *[Hochtief AG, Frankfurt, Germany]*

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KAWASHIMA, M., AOKI, K., ARIE, K., TSUBOI, Y., Neutronic feasibility of an LMFBR super long-life core (SLLC) *[Nippon Atom Ind. Grp. Co. Ltd., Kawasaki, Kanagawa, Japan; Toshiba Co. Ltd., Yokohama, Kanagawa, Japan]*

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WANG, J., MODARRES, M., HUNT, R.N.M., Probabilistic risk assessment: a look at the role of artificial intelligence *[Baltimore Gas & Elect. Co., Calvert Cliffs Nucl. Power Plant, Lusby, MD, USA; Univ. Maryland, College Park, MD, USA]*

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VESELY, W.E., More comprehensive approaches for determining risk sensitivities to component aging *[Sci. Applicat. Int. Corp., Columbus, OH, USA]*

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GRIES, H., WASCHKIES, E., Results of acoustic emission during mechanical and thermal loadings of vessel components and their fracture mechanical interpretation *[Univ. Saarbrücken, Fraunhofer Inst. Zerstörungsfreie Prüfverfahren, Saarbrücken, Germany]*

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SCHMIDT, W.R., KASSAWARA, R.P., Seismic functionality of essential relays in operating nuclear plants *[Elect. Power Res. Inst., Palo Alto, CA, USA; MPR Assoc. Inc., Washington, DC, USA]*

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RAVINDRA, M.K., Seismic probabilistic risk assessment and its impact on margin studies *[EQE Inc., Newport Beach, CA, USA]*

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KENNEDY, R.P., CAMPBELL, R.D., KASSAWARA, R.P., A seismic margin assessment procedure *[Elect. Power Res. Inst., Palo Alto, CA, USA; NTS Engn., Long Beach, CA, USA; RPK Struct. Mech. Consulting Inc., Yorba Linda, CA, USA]*

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GUZY, D.J., RICHARDSON, J.E., Seismic margins issues *[US Nucl. Regulatory Commiss., Washington, DC, USA]*

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CAMPBELL, R.D., HENLEY, B.F., KENNEDY, R.P., KASSAWARA, R.P., Walkdown criteria for evaluating seismic margin in nuclear power plants *[Elect. Power Res. Inst., Palo Alto, CA, USA; NTS Engn., Long Beach, CA, USA; RPK Struct. Mech. Consulting Inc., Yorba Linda, CA, USA]*

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KENNEALLY, R.M., BURNS, J.J. (JR.), Experimental investigation into the seismic behavior of nuclear power plant shear wall structures *[US Nucl. Regulatory Commiss., Washington, DC, USA]*

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CHEN, C., ANGSTADT, C., HAYNER, M., Studies of equipment response to low energy, low velocity, high amplitude and high frequency seismic events *[Cleveland Elect. Illuminating Co., Perry, OH, USA; Gilbert Commonwealth Inc., Reading, PA, USA]*

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BERNERO, R.M., LEE, A.J.H., SOBEL, P.A., High frequency, high amplitude and low energy earthquake study of nuclear power plants *[US Nucl. Regulatory Commiss., Washington, DC, USA]*

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HARDY, G.S., SMITH, P.D., TANG, Y.K., Piping seismic adequacy criteria recommendations based on performance during earthquakes *[EQE Engn. Inc., Costa Mesa, CA, USA; EQE Engn. Inc., San Francisco, CA, USA; Elect. Power Res. Inst., Palo Alto, CA, USA]*

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GUZY, D., Piping design criteria and research – Current NRC activities in dynamic design *[US Nucl. Regulatory Commiss., Washington, DC, USA]*

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JAQUAY, K.R., LARSON, J.E., TANG, H.T., A simplified method for inelastic piping system seismic response prediction *[Elect. Power Res. Inst., Palo Alto, CA, USA; Rockwell Int. Corp., Canoga Park, CA, USA]*

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KEOWEN, R.S., JOHNSON, B.A., MERZ, K.L., Differences in dynamic response of typical Class-II piping due to restraint method and input amplitude *[ANCO Engn. Inc., Culver City, CA, USA]*

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OHNUKI, A., ADACHI, H., MURAO, Y., Scale effects on countercurrent gas-liquid flow in a horizontal tube connected to an inclined riser *[Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan]*

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TUOMISTO, H., KAJANTO, P., Two-phase flow in a full-scale loop seal facility *[Imatra Power Co., Helsinki, Finland]*

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DHIR, V.K., AMAR, R.C., MILLS, J.C., A one dimensional model for the prediction of stratification in horizontal pipes subjected to fluid temperature transient at inlet – Part I. Hydrodynamic model *[Rockwell Int. Corp., Canoga Park, CA, USA; Univ. Calif. Los Angeles, Los Angeles, CA, USA]*

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DHIR, V.K., THUNG, V.X., AMAR, R.C., MILLS, J.C., A one dimensional model for the prediction of stratification in horizontal pipes subjected to fluid temperature transient at inlet – Part II. Thermal model *[Rockwell Int. Corp., Canoga Park, CA, USA; Univ. Calif. Los Angeles, Los Angeles, CA, USA]*

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EPSTEIN, M., ELLISON, P.G., Correlations of the rate of removal of coagulating and depositing aerosols for application to nuclear reactor safety problems *[Fauske & Assoc. Inc., Burr Ridge, IL, USA]*

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ZAHOOR, A., Allowable minimum upper shelf toughness for nuclear reactor pressure vessels *[Novetech Corp., Rockville, MD, USA]*

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STEELE, R. (JR.), MACDONALD, P.E., ARENDTS, J.G., Dynamic load effects on gate valve operability and snubber performance *[EG&G Idaho Inc., Idaho Natl. Engn. Lab., Idaho Falls, ID, USA]*

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MALCHER, L., KOT, C.A., HDR Phase II vibrational experiments *[Argonne Natl. Lab., Argonne, IL, USA; KFZ Karlsruhe GmbH, Karlsruhe, Germany]*

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TASAKA, K., KUKITA, Y., KOIZUMI, Y., OSAKABE, M., NAKAMURA, H., The results of 5% small-break LOCA tests and natural circulation tests at the ROSA-IV LSTF *[Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan]*

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TOLMAN, E.L., KUAN, P., BROUGHTON, J.M., TMI-2 accident scenario update *[EG&G Idaho Inc., Idaho Natl. Engn. Lab., Idaho Falls, ID, USA]*

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HARRINGTON, R.M., Containment venting as a mitigation technique for BWR Mark I plant ATWS *[Oak Ridge Natl. Lab., Oak Ridge, TN, USA]*

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HANSON, D.J., BLACKMAN, H.S., NELSON, W.R., WRIGHT, R.E., LEONARD, M.T., DI SALVO, R., Analysis of containment venting at the Peach Bottom Atomic Power Station *[Battelle Mem. Inst., Columbus, OH, USA; EG&G Idaho Inc., Idaho Natl. Engn. Lab., Idaho Falls, ID, USA]*

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PAIK, C.Y., MULLEN, G., KNOESS, C., GRIFFITH, P., Steam separator modeling for various nuclear reactor transients *[Fauske & Assoc. Inc., Burr Ridge, IL, USA; INSEAD, Fontainebleau, France; MIT, Cambridge, MA, USA]*

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SCHNEIDER, K., WINKLER, F.J., Physical model for reactor coolant pumps *[Siemens AG, KWU, Erlangen, Germany]*

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WOLFERT, K., BRITTAIN, I., CSNI validation matrix for PWR and BWR thermal-hydraulic system codes *[Ges. Reaktorsicherheit GmbH, Garching, Germany; UKAEA Technol., Winfrith Technol. Ctr., Dorchester, Dorset, England]*

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BLACK, P.S., LESLIE, D.C., HEWITT, G.F., Tests of the TRAC code against known analytical solutions for stratified flow *[UKAEA Technol., Harwell Lab., Harwell, Oxon, England; Univ. London, Queen Mary Coll., London, England]*

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WOLF, L., HÄFNER, W., FISCHER, K., SCHYGULLA, U., BAUMANN, W., Application of engineering and multi-dimensional finite difference codes to HDR thermal mixing experiments

TEMB *[Battelle Inst. eV, Frankfurt, Germany; KFZ Karlsruhe GmbH, Karlsruhe, Germany]*

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GREENE, G.A., FINFROCK, C., BURSON, S.B., Phenomenological studies on molten core-concrete interactions *[Brookhaven Natl. Lab., Upton, NY, USA; US Nucl. Regulatory Commiss., Washington, DC, USA]*

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VESELY, W.E., WOLFORD, A.J., Risk evaluations of aging phenomena: The linear aging reliability model and its extensions *[EG&G Idaho Inc., Idaho Natl. Engn. Lab., Idaho Falls, ID, USA; Sci. Applicat. Int. Corp., Columbus, OH, USA]*

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HOLAHAN, G.M., CARUSO, M.A., Overview of recent operating experience regarding plant aging *[US Nucl. Regulatory Commiss., Washington, DC, USA]*

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SHACK, W.J., KASSNER, T.F., MAIYA, P.S., PARK, J.Y., RUTHER, W.E., BWR pipe crack remedies evaluation *[Argonne Natl. Lab., Argonne, IL, USA]*

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COOK, K.V., MCCLUNG, R.W., Flaw density examinations of a clad boiling water reactor pressure vessel segment *[Oak Ridge Natl. Lab., Oak Ridge, TN, USA]*

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IGUCHI, T., MURAO, Y., SUGIMOTO, J., AKIMOTO, H., OKUBO, T., HOJO, T., Summary of CCTF test results – Assessment of current safety evaluation analysis on reflood behaviour during a LOCA in a PWR with cold-leg-injection-type ECCS *[Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan]*

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IGUCHI, T., IWAMURA, T., AKIMOTO, H., ONUKI, A., ABE, Y., HOJO, T., SAKAKI, I., MINATO, A., ADACHI, H., SCTF-III test plan and recent SCTF-III test results *[Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan]*

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WEISS, P.A., HERTLEIN, R.J., UPTF test results: First three separate effect tests *[Siemens AG, KWU, Erlangen, Germany]*

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BOYACK, B.E., CAPPIELLO, M.W., STUMPF, H., SHIRE, P., GILBERT, J., HEDSTROM, J., Analysis results from the Los Alamos 2D/3D program *[Univ. Calif. Los Alamos Sci. Lab., Los Alamos, NM, USA]*

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ANG, M.L., AYTEKIN, A., FOX, A.H., Analysis of flow distribution in a PWR fuel rod bundle model containing a blockage – Part 1. A 61% coplanar blockage *[Loughborough Univ. Technol., Loughborough, Leics, England; Natl. Nucl. Corp. Ltd., Warrington, Cheshire, England]*

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ANG, M.L., AYTEKIN, A., FOX, A.H., Analysis of flow distribution in a PWR fuel rod bundle model containing a blockage – Part 2. A non-coplanar blockage *[Loughborough Univ. Technol., Loughborough, Leics, England; Natl. Nucl. Corp. Ltd., Warrington, Cheshire, England]*

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OLEK, S., On the two-region rewetting model with a step change in the heat transfer coefficient *[Paul Scherrer Inst., Wurenlingen, Switzerland]*

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OLEK, S., The effect of precursory cooling on rewetting of a slab *[Paul Scherrer Inst., Wurenlingen, Switzerland]*

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FELDMAN, E.E., MOHR, D., MESSICK, N.C., WOLZ, G.C., CHANG, L.K., BETTEN, P.R., PLANCHON, H.P., Predicted and measured response of the EBR-II plant to large steam pressure changes *[Argonne Natl. Lab., Argonne, IL, USA]*

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RO, T.S., TODREAS, N.E., Energy transfer mechanisms in LMR rod bundles under mixed convection conditions *[MIT, Cambridge, MA, USA]*

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KUNITOMI, K., INAGAKI, Y., IOKA, I., SUZUKI, K., NEKOYA, S., MIYAMOTO, Y., Thermal and hydraulic tests in HENDEL T_2 supporting the development of the core bottom structure of the High Temperature Engineering Test Reactor (HTTR) *[Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan]*

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TALEYARKHAN, R.P., HARRIS, D.R., Stochastic analysis of mechanical vibrations in reactors *[Rensselaer Polytech. Inst., Troy, NY, USA; Westinghouse Elect. Corp., Pittsburgh, PA, USA]*

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RATHORE, R.K.S., MUNSHI, P., BHATIA, V.K., PANDIMANI, S., Filtered Bessel functions in computerized tomography *[Indian Inst. Technol., Nucl. Engn. Program, Kanpur, Uttar Pradesh, India]*

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KETTER, A., WACHOLDER, E., ELIAS, E., Iodine removal by condensation from containment atmosphere in post external event conditions *[Israel Atom Energy Commiss., Tel Aviv, Israel; Technion Israel Inst. Technol., Haifa, Israel]*

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LIN, W.K., HSU, Y.Y., A weir model to relate the liquid flow rate with the water level in an inverted U-bend *[Univ. Maryland, College Park, MD, USA]*

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BITTERMANN, D., RAU, P., ASHAM, A., BATHEJA, P., PESTER, W., WEHLE, F., Design aspects and pertaining development work for the KWU 200 MW_{th} nuclear heating reactor *[Siemens AG, KWU, Erlangen, Germany]*

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FOSKOLOS, K., GALPERIN, A., GRIMM, P., Solutions of the neutronic design problems of small heating reactor cores based on the BWR principle *[Ben Gurion Univ. Negev, Beersheba, Israel; Paul Scherrer Inst., Wurenlingen, Switzerland]*

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FISCHER, G., SONTHEIMER, F., RUYTER, I., MARKGRAF, J., Experiments on the load following behaviour of PWR fuel rods *[Commiss. European Communities, Joint Res. Ctr., Petten, Netherlands; KFA Jülich GmbH, Jülich, Germany; Siemens AG, KWU, Erlangen, Germany]*

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GROSS, H., FUCHS, H.-P., LIPPERT, H.-J., DAMBIETZ, W., The BWR Hybrid 4 control rod *[Siemens AG, KWU, Erlangen, Germany]*

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HILPERT, H.-J., HENKEL, F.-O., Dynamic analysis and response spectra for the main process building of a reprocessing plant *[Deutsche Ges. Wiederaufarbeitung Kernbrennstoffen mbH, Hannover, Germany; Wolfel Berat. Ing., Hochberg Würzburg, Germany]*

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GRÜTER, L., FORTMANN, M., BHANDARI, S., FAIDY, C., Crack resistance properties of through-cracks in austenitic straight pipes (DN 700) under bending *[Elect. France, Serv. Etud. & Projets Therm. & Nucl., Villeurbanne, France; Interatom GmbH, Bergisch Gladbach, Germany; Novatome, Lyon, France]*

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HUBO, R., TWICKLER, R., HESSE, W., DAHL, W., Failure behaviour of steels with different levels of strength and toughness *[Rhein Westfal TH Aachen, Aachen, Germany]*

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RÖDIG, M., KIENZLER, R., NICKEL, H., SCHUBERT, F., Fatigue and creep crack growth in methane reformer tubes at temperatures above 700 °C *[Fraunhofer Inst. Werkstoffmech., Freiburg, Germany; KFA Jülich GmbH, Jülich, Germany]*

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LAYER, J., LABES, M., HÜLSEN, H., Standardization of piping supports in nuclear power plants using pretested components *[Siemens AG, KWU, Erlangen, Germany; Siemens AG, KWU, Offenbach, Germany]*

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NORTHUP, T.E., PENFIELD, S., Perspectives on deployment of Modular High Temperature Gas-Cooled Power Plants *[Gas Cooled Reactor Assoc., San Diego, CA, USA; Gen. Atom Co., San Diego, CA, USA]*

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KNIZIA, K., SCHWARZ, D., The High Temperature Reactor - An important tool in meeting the challenge of world energy supply *[Vereinigte Elektrizitätswerke Westfalen AG, Dortmund, Germany]*

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HERZOG, G., DÖRFLER, U., LOOS, F., The PHWR of Siemens-KWU as appropriate type of the SMPR-Class *[Siemens AG, KWU, Erlangen, Germany]*

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GONZÁLEZ, A.J., FRISCHENGRUBER, K., RECALDE, J.A., SOLANILLA, R.B., VANZULLI, R.C., ARGOS PHWR-380 - Argentine offer of a safer Pressurized Heavy-Water Reactor of 380 MW ... a many-eyed guardian ... concerned about nuclear power plant safety *[Empresa Nucl. Argentina Cent. Electr. SA, Buenos Aires, Argentina]*

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ARNOLD, W.H., VIJUK, R.M., SHINGLER, W.R., GROSS, M.C., A 10 MWe Pressurized Water Reactor for safe and reliable power *[Westinghouse Elect. Corp., Madison, PA, USA; Westinghouse Elect. Corp., Richland, WA, USA]*

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JOHNSON, R.A., GOLAN, S., GUENTHER, E., SAFR: an economic, inherently safe Liquid Metal Reactor *[Bechtel Power Corp., San Francisco, CA, USA; Combust. Engn. Inc., Windsor, CT, USA; Rockwell Int. Corp., Canoga Park, CA, USA]*

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NEYLAN, A.J., GRAF, D.V., MILLUNZI, A.C., The Modular High Temperature Gas-cooled Reactor (MHTGR) in the United States *[Gen. Atom Technol. Ind. Inc., San Diego, CA, USA]*

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BRANDES, S., KOHL, W., Design and application of the HTR-100 industrial nuclear power plant *[ASEA Brown Boveri AG, Mannheim, Germany; Hochtemperatur Reaktorbau GmbH, Mannheim, Germany]*

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PODEST, M., Reactors for low-temperature nuclear heat supply *[Int. Atom Energy Agcy., Vienna, Austria]*

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SOMMER, H., RIBBAT, B., GHR 10 MW: the technical concept of the Gas-cooled Heating Reactor *[Hochtemperatur Reaktorbau GmbH, Mannheim, Germany]*

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BURGSMÜLLER, P., JACOBI, A. (JR.), JAEGER, J.F., KLÄNTSCHI, M.J., SEIFRITZ, W., VUILLEUMIER, F., WEGMANN, F., The Swiss Heating Reactor (SHR) for district heating of small communities *[BBC & Cie AG, Baden, Switzerland; Bonnard &*

Gardel Ing. SA, Lausanne, Switzerland; EIR, Wurenlingen, Switzerland; Elektrowatt Ing. AG, Zurich, Switzerland; Motor Columbus Ing. AG, Baden, Switzerland; Sulzer AG, Winterthur, Switzerland]

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VÉCSEY, G., DOROSZLAI, P.G.K., GEYSER, a simple, new heating reactor of high inherent safety *[Swiss Inst. Nucl. Res., Villigen, Switzerland]*

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TOWER, S.N., SCHULZ, T.L., VIJUK, R.P., Passive and simplified system features for the Advanced Westinghouse 600 MWe PWR *[Westinghouse Elect. Corp., Pittsburgh, PA, USA]*

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CAIRA, M., CUMO, M., NAVIGLIO, A., SOCRATE, S., Mars-II: a design improvement to reduce construction time and cost *[Univ. Rome, Rome, Italy]*

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LOHNERT, G.H., NABIELEK, H., SCHENK, W., The fuel element of the HTR-Module, a prerequisite of an inherently safe reactor *[Interatom GmbH, Bergisch Gladbach, Germany; KFA Jülich GmbH, Jülich, Germany]*

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SILADY, F.A., MILLUNZI, A.C., KELLEY, A.P. (JR.), CUNLIFFE, J., Safety and licensing of MHTGR *[Bechtel Power Corp., San Francisco, CA, USA; Gas Cooled Reactor Assoc., San Diego, CA, USA; Gen. Atom Co., San Diego, CA, USA]*

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REHM, W., JAHN, W., VERFONDERN, K., Present results and further developments on safety analysis of small and medium-sized HTRS for core heat-up accidents *[KFA Jülich GmbH, Jülich, Germany]*

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WACHHOLZ, W., The safety characteristics of the HTR 500 reactor plant *[Hochtemperatur Reaktorbau GmbH, Mannheim, Germany]*

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INIOTAKIS, N., BARTHELS, H., VON DER DECKEN, C.B., The retardation of the released fission products deriving from graphite structures during a hypothetical HTR-500 accident *[KFA Jülich GmbH, Jülich, Germany]*

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HARDIE, R.W., JACKSON, S.V., United States market potential for Small and Medium-Sized Nuclear Reactors *[Univ. Calif. Los Alamos Sci. Lab., Los Alamos, NM, USA]*

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CANDELI, R., GARRIBBA, S.F., HANSEN, U., LEFEVRE, J.C., LEUCHS, D., SCHÖN, R., VIVANTE, C., Market potential of Small and Medium-Size Nuclear Reactors as combined heat and power plants in Europe *[Commiss. European Communities, Brussels, Belgium; EST GmbH, Essen, Germany; Interatom GmbH, Bergisch Gladbach, Germany; Novatome, Lyon, France; Politecn. Milan, Milan, Italy; Univ. Essen, Essen, Germany]*

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SHAHID, S.H., Prospects of Small and Medium Sized Power Reactors in Pakistan *[Pakistan Atom Energy Commiss., Islamabad, Pakistan]*

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SUZUKI, H., HATAMIYA, S., MURASE, M., Parallel channel effects under BWR LOCA Conditions *[Hitachi Ltd., Hitachi, Ibaraki, Japan]*

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KATAOKA, K., FURUTA, K., OKA, Y., KONDO, S., Neutronic and thermodynamic feasibility of $^{233}UF_6$–$^{237}NpF_6$ fueled transmutation reactor *[Univ. Tokyo, Tokyo, Japan]*

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DI MARZO, M., ALMENAS, K.K., HSU, Y.Y., WANG, Z., The phenomenology of a small break LOCA in a complex thermal hydraulic loop *[Univ. Maryland, College Park, MD, USA]*

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BHANTI, D.P., MALVANKAR, S.V., KOTRAPPA, P., SOMASUNDARAM, S., RAGHUNATH, B., CURTAY, A.M., Aerosol release factor for Pu as a consequence of an ion exchange resin fire in the process cell of a fuel reprocessing plant *[Bhabha Atom Res. Ctr., Bombay, India]*

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FLETCHER, C.D., CALLOW, R.A., Long-term recovery of pressurized water reactors following a large break loss-of-coolant accident *[EG&G Idaho Inc., Idaho Natl. Engn. Lab., Idaho Falls, ID, USA]*

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TAKIZAWA, Y., HAYASHI, T., SAIJOU, N., MORIOKA, T., A post trip operational guidance system for BWR plants *[Nippon Atom Ind. Grp. Co. Ltd., Kawasaki, Kanagawa, Japan; Toshiba Co. Ltd., Yokohama, Kanagawa, Japan]*

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NAGANO, T., OHASHI, M., URABE, Y., HOJO, K., Crack extension analysis of center cracked plate subjected to tension and through-wall cracked pipe subjected to bending *[Mitsubishi Heavy Ind. Co. Ltd., Kobe, Hyogo, Japan; Mitsubishi Heavy Ind. Co. Ltd., Takasago, Hyogo, Japan]*

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NATHWANI, J.S., KEE, B.L., KIM, C.S., KOZLUK, M.J., Ontario Hydro's leak before break approach: Application to the Darlington (CANDU) Nuclear Generating Station A *[Ontario Hydro, Toronto, Ontario, Canada]*

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OKAZAKI, M., YADA, T., ENDOH, T., Surface small crack growth behavior in low-cycle fatigue at elevated temperature and application limit of macroscopic crack growth law *[Nagaoka Univ. Technol., Nagaoka, Niigata, Japan]*

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SHIBATA, K., YASUDA, Y., ONIZAWA, K., MIYAZONO, S., Evaluation of JAERI's ductile pipe fracture test results on stainless steel and carbon steel piping *[Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan]*

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SHIMAKAWA, T., TAKAHASHI, Y., YAGAWA, G., Round-robin activities on finite element analyses of elastic-plastic fracture in Japan *[Cent. Res. Inst. Elect. Power Ind., Tokyo, Japan; Kawasaki Heavy Ind. Co. Ltd., Tokyo, Japan; Univ. Tokyo, Tokyo, Japan]*

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UMEMOTO, T., FURUYA, S., A simplified approach to assess weld residual stress distribution through pipe wall *[Ishikawajima Harima Heavy Ind. Co. Ltd., Yokohama, Kanagawa, Japan]*

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WILKOWSKI, G.M., SCOTT, P.M., A statistical based circumferentially cracked pipe fracture mechanics analysis for design or code implementation *[Battelle Mem. Inst., Columbus, OH, USA]*

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YAGAWA, G., UEDA, H., Behavior of surface crack in plates subjected to tensile loads: Analysis based on fully plastic solutions *[Univ. Tokyo, Tokyo, Japan]*

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YANO, T., MATSUSHIMA, E., OKAMOTO, A., Evaluation of leak flow rate and jet impingement related to leak before break *[Ishikawajima Harima Heavy Ind. Co. Ltd., Yokohama, Kanagawa, Japan]*

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CLÉMENT, G., ACKER, D., LEBEY, J., A practical rule for progressive buckling *[CEA, CENS, IRDI, Gif sur Yvette, France]*

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COMBESCURE, A., PERNETTE, E., Linear and nonlinear buckling of discrete supported cooling towers using special axisymmetric shell elements *[CEA, Dept. Etud. Mecan. & Therm., Saclay, France; Elect. France, Serv. Etud. & Projets Therm. & Nucl., Villeurbanne, France]*

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FITCH, J.R., An efficient static correction algorithm with application to the hydrodynamic loading of thin shell structures *[GE, San Jose, CA, USA]*

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KNOWLES, N.C., LOWE, M.J.S., PIPER, D., An update on project COSA *[WS Atkins Engn. Sci., Epsom, Surrey, England]*

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LEO, R., MAZZOLI, M., Multilevel dynamic substructure iteration method (iterative eigensolution of a multilevel substructure system) *[Ansaldo S.p.A., Genoa, Italy]*

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NATKE, H.G., DANISCH, R., DELINIC, K., Condensation methods for the dynamic analysis of large models *[Siemens AG, KWU, Erlangen, Germany; Univ. Hannover, Hannover, Germany]*

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YOSHIMURA, S., YAGAWA, G., ATLURI, S.N., Generation and propagation analysis of high-strain-rate dynamic crack propagation in a visco-plastic solid *[Georgia Inst. Technol., Atlanta, GA, USA; Univ. Tokyo, Tokyo, Japan]*

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HAO, H., OLIVEIRA, C.S., PENZIEN, J., Multiple-station ground motion processing and simulation based on SMART-1 array data *[Eastern Int. Engn. Inc., Lafayette, CA, USA; Lab. Nacl. Engn. Civil, Lisbon, Portugal; Univ. Calif. Berkeley, Berkeley, CA, USA]*

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JAQUAY, K.R., CASTLE, W.R., LARSON, J.E., TANG, H.T., Incremental-hinge piping analysis methods for inelastic seismic response prediction *[Elect. Power Res. Inst., Palo Alto, CA, USA; Rockwell Int. Corp., Canoga Park, CA, USA]*

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KATO, M., WATANABE, Y., KATO, A., TAKEDA, T., TSUNODA, T., YAMAGUCHI, T., ITOH, M., YASUI, Y., Forced vibration tests on the reactor building of Tsuruga Unit No. 2 Nuclear Power Station *[Japan Atom Power Co. Inc., Tokyo, Japan; Obayashi Corp., Tokyo, Japan]*

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KOBAYASHI, H., YOSHIDA, M., OCHI, Y., Dynamic response of piping system on rack structure with gaps and frictions *[Ishikawajima Harima Heavy Ind. Co. Ltd., Tokyo, Japan; Ishikawajima Harima Heavy Ind. Co. Ltd., Yokohama, Kanagawa, Japan]*

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KOBORI, T., KANAYAMA, H., KAMAGATA, S., Active seismic response control systems for nuclear power plant equipment facilities *[Kajima Corp., Tokyo, Japan]*

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STEVENSON, J.D., Further development of the Load Coefficient Method, LCM, for rational seismic design of nuclear facilities *[Stevenson & Assoc., Cleveland, OH, USA]*

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TANG, H.T., TANG, Y.K., STEPP, J.C., WALL, I.B., LIN, E., CHENG, S.C., LEE, S.K., A large-scale soil-structure interaction experiment: Design and construction *[Elect. Power Res. Inst., Palo Alto, CA, USA; Taiwan Power Co., Taipei, Taiwan]*

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WOLF, J.P., Soil-structure-interaction analysis in time domain *[Elektrowatt Ing. AG, Zurich, Switzerland]*

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RAO, C. KAMESUARA, MIRZA, S., Seismic analysis of high-speed rotating machinery *[Univ. Ottawa, Ottawa, Ontario, Canada]*

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BROCKS, W., KÜNECKE, G., NOACK, H.-D., VEITH, H., On the transferability of fracture-mechanics parameters from specimens to structures using FEM *[Bundesanstalt Materialprüfung, Berlin, Germany]*

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KORDISCH, H., SOMMER, E., SCHMITT, W., The influence of triaxiality on stable crack growth *[Fraunhofer Inst. Werkstoffmech., Freiburg, Germany]*

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BECKER, K.E., JOAS, H.D., MEYER, A.R., SCHMITT-THOMAS, KH.G., Characteristic experimental data for evaluating the fracture toughness of impact loaded medium-scale-specimens *[Tech. Überwachungsverein Bayern eV, Munich, Germany; Tech. Univ. Munich, Munich, Germany]*

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JONES, P.M., CASADEI, F., HALLEUX, J.P., Progress in numerical modelling of dynamic specimen behaviour in the LDTF *[Commiss. European Communities, Euratom, Joint Res. Ctr., Ispra, Italy]*

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DELZANO, C., GUTIERREZ, E., JONES, P.M., VERZELETTI, G., Recent developments and results of LDTF tests on steel and concrete specimens *[Commiss. European Communities, Euratom, Joint Res. Ctr., Ispra, Italy]*

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JULISCH, P., HÄDRICH, H.-J., STADTMÜLLER, W., STURM, D., Load bearing and deformation behaviour of dynamically loaded wide plate specimens *[Univ. Stuttgart, Staatliche Materialprüfungsanstalt, Stuttgart, Germany]*

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BREKOW, G., WÜSTENBERG, H., MÖHRLE, W., SCHULZ, E., Phased array concept for the ultrasonic inservice inspection of the spherical bottom of BWR pressure vessels *[Bundesanstalt Materialprüfung, Berlin, Germany]*

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GEBHARDT, W., SCHMITZ, V., VON BERNUS, L., KRÖNING, M., Evaluation of ultrasonic volume- and underclad indications at long distances *[Fraunhofer Inst. Zerstörungsfreie Prüfverfahren, Saarbrücken, Germany; Siemens AG, KWU, Erlangen, Germany]*

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HEINRICH, D., MAYER, K.-H., MÜLLER, G., PRESTEL, W., Manual and mechanized ultrasonic inspection of large components in respect of flaw estimation by fracture mechanics *[Maschinenfabrik Augsburg Nürnberg Energie GmbH, Nürnberg, Germany]*

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NEUBRECH, G.E., WALTE, F., WASCHKIES, E., KLEIN, M., A fracture mechanics interpretation of acoustic emission results *[Fraunhofer Inst. Zerstörungsfreie Prüfverfahren, Saarbrücken, Germany; KFZ Karlsruhe GmbH, Karlsruhe, Germany]*

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AHLF, J., BELLMANN, D., SCHMITT, F.J., POTT, G., The consideration of irradiation embrittlement of RPV steels in German licensing rules as compared to recent results of irradiation experiments *[Ges. Kernenergieverwertung Schiffbau & Schiffahrt GmbH, Geesthacht, Germany; KFA Jülich GmbH, Jülich, Germany]*

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LOWE, A.L. (JR.), MOORE, K.E., GROSS, L.B., B & W owners group reactor vessel integrity program – The first 10 years *[Babcock & Wilcox Co., Lynchburg, VA, USA]*

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STOPPLER, W., SCHIEDERMAIER, J., HIPPELEIN, K., STURM, D., SHEN, S., Crack behaviour of pipes under internal pressure and simultaneous external bending moment *[Univ. Stuttgart, Staatliche Materialprüfungsanstalt, Stuttgart, Germany]*

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ROOS, E., HERTER, K.-H., JULISCH, P., BARTHOLOMÉ, G., SENSKI, G., Assessment of large scale pipe tests by fracture mechanics approximation procedures with regard to leak-before-break *[Siemens AG, KWU, Erlangen, Germany; Staatliche Materialprüfungsanstalt, Stuttgart, Germany]*

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MIKKOLA, T.P.J., DIEM, H., BLIND, D., HUNGER, H., Failure behavior of a pipe system with a circumferentially orientated flaw – Analytical and experimental investigations *[KFZ Karlsruhe GmbH, Karlsruhe, Germany; Tech. Res. Ctr. Finland, Helsinki, Finland; Univ. Stuttgart, Stuttgart, Germany]*

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SAUTER, A., TURAN, K., KERKHOF, K., WAGEMANN, G., Fracture mechanics analysis of a pipe elbow *[Univ. Stuttgart, Staatliche Materialprüfungsanstalt, Stuttgart, Germany]*

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STELLWAG, B., ODAR, S., Material compatibility during the chemical cleaning of steam generators with chelating solutions *[Siemens AG, KWU, Erlangen, Germany]*

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JOVANOVIC, A., SAUTER, A., LUCIA, A.C., Some current issues in the PTS research *[Commiss. European Communities, Euratom, Joint Res. Ctr., Ispra, Italy; Univ. Stuttgart, Staatliche Materialprüfungsanstalt, Stuttgart, Germany]*

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PENKALLA, H.-J., NICKEL, H., SCHUBERT, F., Multiaxial creep of tubes from Incoloy 800 H and Inconel 617 under static and cyclic loading conditions *[KFA Jülich GmbH, Jülich, Germany]*

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SCHUBERT, F., AHMED, K., BREITBACH, G., NICKEL, H., Experimental and theoretical investigations of creep buckling on NiCr 22 Co 12 Mo tubes at 950 °C *[KFA Jülich GmbH, Jülich, Germany]*

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RINTAMAA, H., KEINÄNEN, H., TÖRRÖNEN, K., TALJA, H., SAARENHEIMO, A., IKONEN, K., Verification of the analysis for fracture behaviour estimation of pressure vessels *[Tech. Res. Ctr. Finland, Espoo, Finland]*

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BAUMANN, B., GNIRSS, G., NEUREUTHER, H., SCHNEIDER, K., MINERVA, qualification of dissimilar welds for HTR-application *[ASEA Brown Boveri AG, Mannheim, Germany]*

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AURICH, D., WOBST, K., KRAFKA, H., J_R-curves of wide plates and CT25 specimens – Comparison of the results of a pressure vessel *[Bundesanstalt Materialprüfung, Berlin, Germany]*

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RUBEL, H., MARSCHKE, D., TAUTZ, J., MICHEEL, G., Inconel X-750 as material for core internals and core components – Status of in-service experience and replacements at Siemens KWU Group *[Siemens AG, KWU, Erlangen, Germany]*

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KUSSMAUL, K., ROOS, E., GUTH, W., SZIMMAT, J., A contribution to the numerical and experimental determination of residual stresses in welds *[Univ. Stuttgart, Stuttgart, Germany; Univ. Stuttgart, Staatliche Materialprüfungsanstalt, Stuttgart, Germany]*

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KOWALSKI, S.J., LIPNICKI, Z., Natural convective flow between an array of vertical cylinders *[Pedagog Univ., Zielona Gora, Poland; Polish Acad. Sci., Inst. Fundamental Technol. Res., Poznan, Poland]*

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GARLAND, W.J., HAND, B.J., Simple functions for the fast approximation of light water thermodynamic properties *[McMaster Univ., Hamilton, Ontario, Canada]*

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CHANG, S.H., LEE, K.W., A critical heat flux model based on mass, energy and momentum balance for upflow boiling at low qualities *[Korea Adv. Inst. Sci. & Technol., Seoul, South Korea]*

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CHANG, S.H., LEE, K.W., GROENEVELD, D.C., Transient-effects modeling of critical heat flux *[Atom Energy Canada Ltd. Res., Chalk River Nucl. Labs, Chalk River, Ontario, Canada; Korea Adv. Inst. Sci. & Technol., Seoul, South Korea]*

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HUTTON, P.H., An overview of development and application of acoustic emission methods in the United States *[Battelle Mem. Inst., Pacific Northwestern Labs, Richland, WA, USA]*

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JAX, P., RUTHROF, K., Acoustic emission inspections of nuclear components considering recent research programs *[Siemens AG, KWU, Erlangen, Germany]*

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LUCIA, A.C., TONOLINI, F., General review of recent activities in acoustic emission technology in Italy *[Commiss. European Communities, Euratom, Joint Res. Ctr., Ispra, Italy; Ctr. Informaz. Studi Esperienze S.p.A., Segrate, Italy]*

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HOUSIADAS, C., VETEAU, J.M., DERUAZ, R., Two-dimensional quench front progression in a multi-assembly rod bundle *[CEA, CEN, DRN, DTP, STR, Grenoble, France]*

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MAJUMDAR, D., Artificial intelligence applications in the nuclear industry: An international view *[US DOE, Idaho Operat. Off., Idaho Falls, ID, USA]*

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WU, J.S., APOSTOLAKIS, G.E., OKRENT, D., Probabilistic risk assessment and intelligent decision support systems *[Univ. Calif. Los Angeles, Los Angeles, CA, USA]*

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STEELE, W.G., WAZZAN, A.R., OKRENT, D., Steady-state fission gas behavior in uranium-plutonium-zirconium metal fuel elements *[TRW Co. Inc., Redondo Beach, CA, USA; Univ. Calif. Los Angeles, Los Angeles, CA, USA]*

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MANAHAN, M.P., KOHLI, R., SANTUCCI, J., SIPUSH, P., A phenomenological investigation of in-reactor cracking of Type 304 stainless steel control rod cladding *[Battelle Mem. Inst., Columbus, OH, USA; Elect. Power Res. Inst., Palo Alto, CA, USA; Westinghouse Elect. Corp., Pittsburgh, PA, USA]*

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VAN GOETHEM, G., LASSMANN, K., The coupling algorithm between fuel pin and coolant channel in the European accident code EAC-2 *[Commiss. European Communities, Euratom, Joint Res. Ctr., Ispra, Italy; European Inst. Transuranium Elements, Joint Res. Ctr., Karlsruhe, Germany]*

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CORSI, F., FABI, A., DI GIAMBERARDINO, P., BOTTI, G., PASQUALE, G., DAPOR, V., Experimental and analytical study of creep cracks damage in high temperature sodium plant branch connections *[Energia Nucl. & Energia Alternat., Brasimone, Italy; Energia Nucl. & Energia Alternat., Milan, Italy; Ente Nazl. Energia Atom, Rome, Italy]*

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BAUERMEISTER, M., LAUE, H., On the state of LMFBR structural analysis and existing rules with regard to Class 1 components of SNR 2 *[Interatom GmbH, Bergisch Gladbach, Germany]*

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SAKURAI, A., MASUKO, Y., KURIHARA, C., ISHIHAMA, K., YASHIRO, T., CHANG, Y.W., RODWELL, E., Seismic sloshing experiments of large pool-type fast breeder reactors *[Argonne Natl. Lab., Argonne, IL, USA; Elect. Power Ind., Tokyo, Japan; Elect. Power Res. Inst., Palo Alto, CA, USA; Hitachi Ltd., Hitachi, Ibaraki, Japan]*

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CHANG, Y.W., GVILDYS, J., MA, D.C., SINGER, R., RODWELL, E., SAKURAI, A., Numerical simulation of seismic sloshing of LMR reactors *[Argonne Natl. Lab., Argonne, IL, USA; Elect. Power Ind., Tokyo, Japan; Elect. Power Res. Inst., Palo Alto, CA, USA]*

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FUJITA, K., ITO, T., TASHIMO, M., SAKURAI, A., KURIHARA, C., Study on the seismic response of a reactor vessel of a pool type LMFBR including fluid-structure interaction *[Cent. Res. Inst. Elect. Power Ind., Abiko, Chiba, Japan; Mitsubishi Heavy Ind. Co. Ltd., Kobe, Hyogo, Japan; Mitsubishi Heavy Ind. Co. Ltd., Takasago, Hyogo, Japan]*

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GROENEVELD, D.C., CHENG, S.C., LEUNG, L.K.H., NGUYEN, C., Computation of single- and two-phase heat transfer rates suitable for water-cooled tubes and subchannels *[Atom Energy Canada Ltd. Res., Chalk River Nucl. Labs, Chalk River, Ontario, Canada; Univ. Ottawa, Ottawa, Ontario, Canada]*

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MOROOKA, S., ISHIZUKA, T., IIZUKA, M., YOSHIMURA, K., Experimental study on void fraction in a simulated BWR fuel assembly (evaluation of cross-sectional averaged void fraction) *[Isoga Engn. Ctr., Toshiba, Japan; Toshiba Co. Ltd., Yokohama, Kanagawa, Japan]*

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TAYAL, M., The finite element code FEAT to calculate temperatures in solids of arbitrary shapes *[Atom Energy Canada Ltd. Res., Sheridan Pk. Res. Community, Mississauga, Ontario, Canada]*

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RAZZAGHI, M., Droplet size estimation of two-phase flashing jets *[Atom Energy Canada Ltd. Res., Whiteshell Labs, Pinawa, Manitoba, Canada]*

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MARIGO, J.J., Constitutive relations in plasticity, damage and fracture mechanics based on a work property *[Elect. France, Div. R&D, Clamart, France]*

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FOUGERES, R., SIDOROFF, F., The evolutive Masing model and its application to cyclic plasticity and aging *[Ecole Cent. Lyon, Mecan. Solides, Ecully, France; INSA, GEMPPM, Villeurbanne, France]*

Vol. 114 No. 3 (1989) 285-294
STECK, E.A., A stochastic model for the interaction of plasticity and creep in metals *[Tech. Univ. Braunschweig, Braunschweig, Germany]*

Vol. 114 No. 3 (1989) 295-309
INOUE, T., OHNO, N., SUZUKI, A., IGARI, T., Evaluation of inelastic constitutive models under plasticity creep interaction for 2 1/4Cr-1Mo steel at 600 °C *[Ishikawajima Harima Heavy Ind. Co. Ltd., Tokyo, Japan; Kyoto Univ., Kyoto, Japan; Mitsubishi Heavy Ind. Co. Ltd., Nagasaki, Japan; Nagoya Univ., Nagoya, Aichi, Japan]*

Vol. 114 No. 3 (1989) 311-321
INOUE, T., IGARI, T., OKAZAKI, M., SAKANE, M., TOKIMASA, K., Fatigue-creep life prediction of 2 1/4Cr-1Mo steel by inelastic analysis *[Kyoto Univ., Kyoto, Japan; Mitsubishi Heavy Ind. Co. Ltd., Nagasaki, Japan; Nagaoka Univ. Technol., Nagaoka, Niigata, Japan; Ritsumeikan Univ., Kyoto, Japan; Sumitomo Met. Ind. Ltd., Amagasaki, Hyogo, Japan]*

Vol. 114 No. 3 (1989) 323-333
CHRYSOCHOOS, A., MAISONNEUVE, O., MARTIN, G., CAUMON, H., CHEZEAUX, J.C., Plastic and dissipated work and stored energy *[CNRS, Mecan. & Acoust. Lab., Marseille, France; Univ. Montpellier 2, Montpellier, France]*

Vol. 114 No. 3 (1989) 335-344
OHNO, N., KOMAI, T., SATRA, M., Comparison between an improved simplified method and a detailed one for the elastic-plastic analysis of cyclically loaded structures *[Natl. Res. Inst. Machine Design, Prague, Czech Republic; Toyohashi Univ. Technol., Toyohashi, Aichi, Japan]*

Vol. 114 No. 3 (1989) 345-353
BENALLAL, A., LE GALLO, P., MARQUIS, D., An experimental investigation of cyclic hardening of 316 stainless steel and of 2024 aluminum alloy under multi-axial loadings *[Univ. Paris 06, Ecole Normale Super Cachan, CNRS, Mec. & Tech. L, Cachan, France]*

Vol. 114 No. 3 (1989) 355-364
IKEGAMI, K., NIITSU, Y., Effects of complex loadings on plastic deformation of stainless steel (SUS 304) at high temperature *[Tokyo Inst. Technol., Yokohama, Kanagawa, Japan]*

Vol. 114 No. 3 (1989) 365-377
DELOBELLE, P., TRIVAUDEY, F., OYTANA, C., High temperature creep damage under biaxial loading: INCO 718 and 316 (17-12 SPH) steels *[Fac. Sci. & Tech. Besancon, Fac. Sci. & Techn., Besancon, France]*

Vol. 114 No. 3 (1989) 379-383
WHITE, P.S., JAKEMAN, R.R., CORSI, F., TERZAGHI, A., CEC inelastic benchmark exercise on a two-bar structure subjected to cyclic thermal loading *[Commiss. European Communities, Brussels, Belgium; Ente Nazl. Energia Atom, Rome, Italy; GEC Engn. Res. Ctr., Whetstone, England]*

Vol. 114 No. 3 (1989) 385-393
KALNINS, A., UPDIKE, D.P., Elasto-plastic analysis of thin shells under thermal transients *[Lehigh Univ., Bethlehem, PA, USA]*

Vol. 114 No. 3 (1989) 395-403
MESSMER, S., SAYIR, M., Dynamic elastic-plastic behaviour of a frame including coupled bending and torsion *[Swiss Fed. Inst. Technol., Zurich, Switzerland]*

Vol. 114 No. 3 (1989) 405-413
KOLLMANN, F.G., Viscoplastic deformation of rotating thin-walled disks *[TH Darmstadt, Darmstadt, Germany]*

Vol. 114 No. 3 (1989) 415-436
DHALLA, A.K., Nonlinear structural analysis methods and their application to elevated temperature design: A United states perspective *[Westinghouse Elect. Corp., Madison, PA, USA]*

Vol. 115 No. 1 (1989) 1-6
WANNER, R., BROSI, S., RÖSEL, R., MERCIER, O., Influence of model geometry on stress intensity for a cyclically thermally loaded nozzle corner crack *[Paul Scherrer Inst., Villigen, Switzerland]*

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CRUTZEN, S., JEHENSON, P., NICHOLS, R.W., MCDONALD, N., The major results of the PISC II RRT *[Commiss. European Communities, Euratom, Joint Res. Ctr., Ispra, Italy; Nichols Consultancies, Warrington, Cheshire, England; OECD Nucl. Energy Agcy., Paris, France]*

Vol. 115 No. 1 (1989) 23-30
EASON, E.A., ANDREW, S.P., WARMBRODT, S.B., NELSON, E.E., GILMAN, J.D., Analysis of pressure vessel steel fatigue tests in air *[Elect. Power Res. Inst., Palo Alto, CA, USA; Failure Anal. Assoc., Palo Alto, CA, USA; Modeling & Comp. Serv., Sunnyvale, CA, USA]*

Vol. 115 No. 1 (1989) 31-39
SAKAI, Y., TAMANOI, K., OGURA, N., Application of tanh curve fit analysis to fracture toughness data of Japanese RPVS *[Mitsubishi Met. Corp. Ltd., Tokyo, Japan; Yokohama Natl. Univ., Yokohama, Kanagawa, Japan]*

Vol. 115 No. 1 (1989) 41-47
NORRIS, D.M., KISHIDA, K., Evaluation of flaws in nuclear piping *[Elect. Power Res. Inst., Palo Alto, CA, USA; Ishikawajima Harima Heavy Ind. Co. Ltd., Yokohama, Kanagawa, Japan]*

Vol. 115 No. 1 (1989) 49-59
SCHIMMELPFENNIG, K., BORGERHOFF, M., Investigations on the behaviour of structural parts of PCRVs as a basis for specific HTR design criteria *[Stangenberg Schnellenbach & Partner Berat. Ing. GmbH, Bochum, Germany]*

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OHOMORI, N., TSUBOTA, H., INOUE, N., KURIHARA, K., WATANABE, S., Reinforced concrete membrane elements subjected to reversed cyclic in-plane shear stress *[Kajima Inst. Construct. Technol., Tokyo, Japan]*

Vol. 115 No. 1 (1989) 73-89
PFEIFFER, P.A., KULAK, R.F., KENNEDY, J.M., MARCHERTAS, A.H., FIALA, C., BELYTSCHKO, T., Pretest analysis of a 1: 6-scale reinforced concrete containment model subject to pressurization *[Argonne Natl. Lab., Argonne, IL, USA; Northwestern Univ., Evanston, IL, USA]*

Vol. 115 No. 1 (1989) 91-103
VARDANEGA, C., CREMONINI, M.G., MIRONI, M., LUCIANI, A., Response of buried pipes to missile impact *[Dappolonia S.p.A., Genoa, Italy; Ente Nazl. Energia Elett., Rome, Italy]*

Vol. 115 No. 1 (1989) 105-112
LEPAREUX, M., JAMET, PH., MATHERON, PH., LIEUTENANT, J.L., COUILLEAUX, J., DUBOELLE, D., AGUILAR, J., Experimental and numerical studies of impacts on stainless steel plates subjected to rigid missiles at low velocity *[CEA, CEN, IPSN, Fontenay Aux Roses, France; CEA, CENS, IRDI, Gif sur Yvette, France]*

Vol. 115 No. 1 (1989) 113-120
FULLARD, K., BARR, P., Development of design guidance for low velocity impacts on concrete floors *[Berkeley Nucl. Labs, Berkeley, Glos, England; UKAEA Technol., Warrington, Cheshire, England]*

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RIERA, J.D., Penetration, scabbing and perforation of concrete structures hit by solid missiles *[Univ. Fed. Rio Grande Sul, Porto Alegre, RS, Brazil]*

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WATSON, I.A., JOHNSTON, B.D., Treatment of dependent failure in PSA *[Safety & Reliability Directorate, Warrington, Cheshire, England]*

Vol. 115 No. 1 (1989) 143-171
KOZIN, F., BOGDANOFF, J.L., Probabilistic models of fatigue crack growth: Results and speculations *[Polytech. Inst. New York, Farmingdale, NY, USA; Purdue Univ., West Lafayette, IN, USA]*

Vol. 115 No. 1 (1989) 173-179
APOSTOLAKIS, G.E., Uncertainty in probabilistic safety assessment *[Univ. Calif. Los Angeles, Los Angeles, CA, USA]*

Vol. 115 No. 1 (1989) 181-190
NIEHAUS, F., Prospects for use of probabilistic safety criteria *[Int. Atom Energy Agcy., Vienna, Austria]*

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ROSZTOCZY, Z.R., Consideration of severe accidents in the licensing of nuclear power plants *[US Nucl. Regulatory Commiss., Washington, DC, USA]*

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HALL, R.E., GUNTHER, W., BOCCIO, J.L., Managing the effects of aging and reliability improvement *[Brookhaven Natl. Lab., Upton, NY, USA]*

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DIERCKS, D.R., Effect of decontamination on aging processes and considerations for life extension *[Argonne Natl. Lab., Argonne, IL, USA]*

Vol. 115 No. 2-3 (1989) 219-271
RUBIO, A., LOEWENSTEIN, W.B., OEHLBERG, R., Nuclear safety research: Responsive industry results *[Elect. Power Res. Inst., Palo Alto, CA, USA]*

Vol. 115 No. 2-3 (1989) 273-279
DALING, P.M., MILSTEAD, W.C., Application of a methodology to determine priorities of nuclear power plant safety issues *[Battelle Mem. Inst., Pacific Northwestern Labs, Richland, WA, USA; US Nucl. Regulatory Commiss., Washington, DC, USA]*

Vol. 115 No. 2-3 (1989) 281-288
WOLFE, B., WILKINS, D.R., Future directions in boiling water reactor design *[GE, San Jose, CA, USA]*

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OTT, L.J., Advanced severe accident response models for BWR application *[Oak Ridge Natl. Lab., Oak Ridge, TN, USA]*

Vol. 115 No. 2-3 (1989) 305-313
BURSON, S.B., BRADLEY, D., BROCKMANN, J., COPUS, E., POWERS, D., GREENE, G., ALEXANDER, C., United States Nuclear Regulatory Commission Research Program on molten core debris interactions in the reactor cavity *[Battelle Mem. Inst., Columbus, OH, USA; Brookhaven Natl. Lab., Upton, NY, USA; Sandia Natl. Labs, Albuquerque, NM, USA; US Nucl. Regulatory Commiss., Washington, DC, USA]*

Vol. 115 No. 2-3 (1989) 315-321
NEIMARK, L.A., STRAIN, R.V., SANECKI, J.E., JACKSON, W.D., The microstructural and microchemical characterization of samples from the TMI-2 core *[Argonne Natl. Lab., Argonne, IL, USA]*

Vol. 115 No. 2-3 (1989) 323-330
GRIFFITH, P., SUNUNU, J.C., Wear in check valves due to flow induced motion *[MIT, Cambridge, MA, USA]*

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CRAPO, H.S., Containment penetration system (CPS) valve tests under accident loads *[EG&G Idaho Inc., Idaho Natl. Engn. Lab., Idaho Falls, ID, USA]*

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STEELE, R. (JR.), ARENDTS, J.G., Performance of a piping system and equipment in the HDR simulated seismic experiments *[EG&G Idaho Inc., Idaho Natl. Engn. Lab., Idaho Falls, ID, USA]*

Vol. 115 No. 2-3 (1989) 349-357
ISKANDER, S.K., ALEXANDER, D.J., BOLT, S.E., COOK, K.V., CORWIN, W.R., OLAND, B.C., NANSTAD, R.K., ROBINSON, G.C., Effect of commercial cladding on the fracture behavior of pressure vessel steel plates *[Oak Ridge Natl. Lab., Oak Ridge, TN, USA]*

Vol. 115 No. 2-3 (1989) 359-367
BRYAN, R.H., BASS, B.R., BOLT, S.E., BRYSON, J.W., CORWIN, W.R., NANSTAD, R.K., MERKLE, J.G., ROBINSON, G.C., Performance of low-upper-shelf material under pressurized-thermal-shock loading *[Oak Ridge Natl. Lab., Oak Ridge, TN, USA]*

Vol. 115 No. 2-3 (1989) 369-385
KURTZ, R.J., BRADLEY, E.R., SIMONEN, F.A., BOWEN, W.M., Surry Steam Generator Program: Final results, evaluation of NDE performance, and technical basis for improved ISI and plugging criteria *[Battelle Mem. Inst., Pacific Northwestern Labs, Richland, WA, USA]*

Vol. 116 No. 1 (1989) 1-6
ROMETSCH, R., Containment and retention of waste materials: an overview of Swiss projects for the disposal of radioactive wastes *[Natl. Genossenschaft Lagerung Radioaktiver Abfalle, Baden, Switzerland]*

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LIEB, R.W., Presentation of the Grimsel Test Site *[Natl. Genossenschaft Lagerung Radioaktiver Abfalle, Baden, Switzerland]*

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EGGER, P., Study of excavation induced rock damage at the Grimsel Underground Rock Laboratory *[Swiss Fed. Inst. Technol., Lausanne, Switzerland]*

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BRÄUER, V., HEUSERMANN, S., PAHL, A., Rock stress measurements in the Grimsel Underground Rock Laboratory and their geological interpretation *[Bundesanstalt Geowissensch. & Rohstoffe, Hannover, Germany]*

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SCHNEEFUSS, J., GOMMLICH, G., NOELL, U., The heater test at the Grimsel Rock Laboratory: the thermo-mechanical response of the rock mass to a heat flux *[GSF IFT, Braunschweig, Germany]*

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KNECHT, B., VAN DORP, F., Concept and design of engineered barriers in Swiss repository projects *[Natl. Genossenschaft Lagerung Radioaktiver Abfalle, Baden, Switzerland]*

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BERG, H.P., Requirements on waste packages resulting from mechanical and thermal impact during the operational phase of a waste repository *[Phys. Tech. Bundesanstalt, Braunschweig, Germany]*

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DAWSON, P., Some considerations of the use of concrete for radioactive waste repositories *[Taylor Woodrow Engn. Ltd., Southall, Middx, England]*

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KNOWLES, N.C., On the reliability of computer predictions of the geomechanical behaviour of rock-salt *[WS Atkins Engn. Sci., Epsom, Surrey, England]*

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ISHIGURO, K., KAWAMURA, K., SONOBE, H., NODAKA, M., ARAI, T., YUSA, Y., TSUNODA, N., Experimental approach to performance of engineered barriers under repository conditions *[Power Reactor & Nucl. Fuel Dev. Corp., Tokai, Ibaraki, Japan]*

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VITALE, E., Trends in the evaluation of the structural integrity of RPVs *[Univ. Pisa, Pisa, Italy]*

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KEY, S.W., PETNEY, S.V., CLANCY, R.M., The impact modeling of structures using solid, shell, and membrane finite elements *[RE Spec. Inc., Albuquerque, NM, USA]*

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LELLOUCHE, G.S., The boiling transition: Analysis and data comparisons *[S. Levy Inc., Campbell, CA, USA]*

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SCHWARTZBECK, R.K., KOCAMUSTAFAOGULLARI, G., Similarity requirements for two-phase flow-pattern transitions *[Univ. Wisconsin, Milwaukee, WI, USA]*

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TAYAL, M., Modelling the bending/bowing of composite beams such as nuclear fuel: The BOW code *[Atom Energy Canada Ltd. Res., Sheridan Pk. Res. Community, Mississauga, Ontario, Canada]*

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ROSENFIELD, A.R., AHMAD, J., CIALONE, H.J., LANDOW, M.P., MINCER, P.N., PAPASPYROPOULOS, V., Crack arrest toughness of nodular iron *[Battelle Mem. Inst., Columbus, OH, USA]*

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YANAGISAWA, K., A study on the behavior of pressurized hollow UO_2 fuel under reactivity initiated accident conditions *[Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan]*

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KALYANASUNDARAM, P., JAYAKUMAR, T., RAJ, B., MURTHY, C.R.L., KRISHNAN, A., Acoustic emission technique for leak detection in an end shield of a pressurised heavy water

reactor *[Indian Inst. Sci., Dept. Aerosp. Engn., Bangalore, Karnataka, India; Indira Gandhi Ctr. Atom Res., Kalpakkam, India; Nucl. Power Corp., Bombay, India]*

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THOMAS, K., Creep ratchetting tests and analysis of a pressurized elbow at 593 °C subjected to cyclic bending *[Westinghouse Elect. Corp., Madison, PA, USA]*

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CESARI, F.G., FERRARI, G., GHIA, S., PADOVANI, R., In-plane bending test of a piping elbow *[Ente Nazl. Energia Elett., Milan, Italy; Univ. Bologna, Bologna, Italy]*

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GUIONNET, C., Modelization of ratcheting in biaxial experiments *[CEA, CENS, IRDI, Gif sur Yvette, France]*

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BREITBACH, G., OVER, H.H., SCHUBERT, F., Experimentally verified creep ratcheting analysis *[KFA Jülich GmbH, Jülich, Germany]*

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PONTER, A.R.S., CARTER, K.F., Upper bound methods for use in the design and assessment of axisymmetric thin shells subjected to cyclic thermal loading *[Univ. Leicester, Leicester, England]*

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MOULIN, D., COMBESCURE, A., ACKER, D., A review of thermal buckling analysis methods *[CEA, CENS, IRDI, Gif sur Yvette, France]*

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CONTESTI, E., CAILLETAUD, G., Description of creep-plasticity interaction with non-unified constitutive equations: Application to an austenitic stainless steel *[Ecole Mines Paris, CNRS, Ctr. Mat., Evry, France]*

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INGLEBERT, G., FRELAT, J., Quick analysis of inelastic structures using a simplified method *[Ecole Polytech., CNRS, Mecan. Solides Lab., Palaiseau, France; ISMCM, St. Ouen, France]*

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PIQUES, R., BENSUSSAN, PH., PINEAU, A., Crack initiation and growth under creep and fatigue loading of an austenitic stainless steel *[Ecole Mines Paris, CNRS, Ctr. Mat., Evry, France]*

Vol. 116 No. 3 (1989) 307-313
FAN, J.H., HUANG, J., ZHEN, X.G., Microscopically based constitutive relations for damage mechanics and creep-plasticity interaction *[Chongqing Univ., Inst. Constitut. Theory, Chongqing, P.R. China]*

Vol. 116 No. 3 (1989) 315-320
HITTINGER, M., RAVIER, P., BERNARD, A., FOUET, J.M., Expert system driven software *[Agence Saclay, Gif sur Yvette, France; Univ. Paris 06, Ecole Normale Super Cachan, CNRS, Mec. & Tech. L, Cachan, France]*

Vol. 116 No. 3 (1989) 321-328
AINSWORTH, R.A., Structural assessments of creep crack growth *[Berkeley Nucl. Labs, Berkeley, Glos, England]*

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ATLURI, S.N., Computational techniques for inelastic stress and fracture analyses *[Georgia Inst. Technol., Atlanta, GA, USA]*

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GAUTHIER, J.P., PETREQUIN, P., High cycle fatigue of austenitic stainless steels under random loading *[CEA, CENS, IRDI, Gif sur Yvette, France]*

Vol. 116 No. 3 (1989) 355-362
BAMMANN, D.J., AIFANTIS, E.C., A damage model for ductile metals *[Michigan Technol. Univ., Houghton, MI, USA; Sandia Natl. Labs, Livermore, CA, USA]*

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COCKS, A.C.F., PONTER, A.R.S., Creep deformation and failure under cyclic thermal loading *[Univ. Leicester, Leicester, England]*

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THORAVAL, G., Creep of high temperature steam piping: EDF experience with fossil-fired power plants from 1955 to 1987 *[Elect. France, Paris, France]*

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REGIS, V., D'ANGELO, D., Advanced residual life methods for improved design and operation *[Ente Nazl. Energia Elett., Milan, Italy]*

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ZAMRIK, S.Y., PANGBORN, R.N., Fatigue damage assessment using X-ray diffraction and life prediction methodology *[Penn. State Univ., University Park, PA, USA]*

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SPERANDIO, M., RICARD, J.B., Detection of significant events and residual life estimation for LMFBRs components *[Elect. France, Serv. Etud. & Projets Therm. & Nucl., Villeurbanne, France; Novatome, Lyon, France]*

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WATASHI, K., KANAZAWA, S., UMEDA, H., KOIDE, A., IMAZU, A., YOSHIDA, H., Creep-fatigue test of a thick-walled vessel under thermal transient loadings *[Century Res. Ctr. Corp. Ltd., Tokyo, Japan; Power Reactor & Nucl. Fuel Dev. Corp., Oarai, Ibaraki, Japan]*

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IONESCU, V.T., Environmental impact of "controlled" radioactivity release *[Colenco AG, Baden, Switzerland]*

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HICKEN, E.F., Accident management measures to prevent accidents or to mitigate its consequences for LWRs in the FRG *[Ges. Reaktorsicherheit GmbH, Garching, Germany]*

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CZECH, J., FABIAN, H., GAST, P., GREMM, O., Mitigation of severe accident consequences by the containment design of KWU-LWR *[Siemens AG, KWU, Erlangen, Germany]*

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ESPEFÄLT, R., Severe accident mitigation programme for the Forsmark and Ringhals plants *[Swedish State Power Board, Vallingby, Sweden]*

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TUOMISTO, H., Filtered venting considerations of an ice condenser containment *[No address]*

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KAKODKAR, A., KUSHWAHA, H.S., DUTTA, B.K., Structural evolution of containment for Indian PHWRs *[Bhabha Atom Res. Ctr., Bombay, India]*

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ALSMEYER, H., Containment loadings from melt-concrete interaction *[KFZ Karlsruhe GmbH, Karlsruhe, Germany]*

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LANGHANS, J., Fast breeder reactor building, severe accident loading and ultimate capacity *[Ges. Reaktorsicherheit GmbH, Cologne, Germany]*

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SAMMATARO, R.F., Lifetime integrity requirements for containments in the United States *[Gen. Dynam. Corp., Div. Elect. Boat, Groton, CT, USA]*

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HANSON, N.W., SCHULTZ, D.M., TANG, H.T., Implications of results from full-scale tests of reinforced and prestressed concrete containments *[Construct. Technol. Labs Inc., Skokie, IL, USA; Elect. Power Res. Inst., Palo Alto, CA, USA]*

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ROGERS, J.D., GREIMANN, L.F., Analysis of a stiffener intersection eccentricity in a steel containment *[Iowa State Univ. Sci. & Technol., Ames, IA, USA; Sandia Natl. Labs, Albuquerque, NM, USA]*

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FANOUS, F., GREIMANN, L.F., Strain-based failure criteria for steel containments *[Iowa State Univ. Sci. & Technol., Ames, IA, USA]*

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LIU, W.K., URAS, R.A., Transient failure analysis of liquid-filled shells – Part I: Theory *[Northwestern Univ., Evanston, IL, USA]*

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LIU, W.K., URAS, R.A., Transient failure analysis of liquid-filled shells – Part II: Applications *[Northwestern Univ., Evanston, IL, USA]*

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SUMI, N., HETNARSKI, R.B., Transient thermal stresses due to a zonal heat source moving back and forth over the surface on an infinite plate *[Rochester Inst. Technol., Rochester, NY, USA; Shizuoka Univ., Shizuoka, Japan]*

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YAMAMOTO, T., TAKEDA, T., SEKIYA, T., NAKAMURA, H., KAMEI, M., Analysis of temperature noise propagation in fast breeder core by the two-equation model *[Osaka Univ., Osaka, Japan; Power Reactor & Nucl. Fuel Dev. Corp., Oarai, Ibaraki, Japan]*

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EWALD, J., MAILE, K., TSCHEUSCHNER, R., Creep crack growth assessment by means of a crack tip/far field concept *[IFW, Darmstadt, Germany; Siemens AG, KWU, Mülheim, Germany; Staatliche Materialprüfungsanstalt, Stuttgart, Germany]*

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WALKER, C.T., LASSMANN, K., RONCHI, C., COQUERELLE, M., MOGENSEN, M., The D-COM blind problem on fission gas release: the predictions of the TRANS-URANUS and FUTURE codes *[European Inst. Transuranium Elements, Joint Res. Ctr., Karlsruhe, Germany; Riso Natl. Lab., Roskilde, Denmark]*

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BAUM, M.R., Rupture of a high pressure gas or steam pipe in a tunnel: a preliminary investigation of the jet thrust exerted on a tunnel barrier *[Berkeley Nucl. Labs, Berkeley, Glos, England]*

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GARDNER, G.C., Air-water model studies of cocurrent flow into and along a PWR hot leg to the steam generator *[Cent. Elect. Res. Labs, Leatherhead, Surrey, England]*

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CHOI, J.I., MEYER, J.E., LANNING, D.D., Automatic controller for steam generator water level during low power operation *[Korea Atom Energy Res. Inst., Taejon, South Korea; MIT, Cambridge, MA, USA]*

Vol. 117 No. 3 (1989) 275-286
NASER, J.A., CAIN, D.G., SUN, B.K.-H., COLLEY, R.W., HIROTA, N.S., GELHAUS, F.E., Expert system applications to nuclear power for enhancement of productivity and performance *[Elect. Power Res. Inst., Palo Alto, CA, USA]*

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THEYMANN, W., LANGE, G., Research and development of selected components of the high-temperature reactor for process heat generation: Results and their application *[Hochtemperatur Reaktorbau GmbH, Jülich, Germany]*

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BIELOR, E., FREIMAN, M., KRUTZIK, N.J., Accuracy of dynamic calculations using shell models under local impulse loading *[Siemens AG, KWU, Offenbach, Germany]*

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KRUTZIK, N.J., FREIMAN, M., TROPP, R., Nonlinear calculations for concrete structures related to prediction of crack propagation and material removal *[Siemens AG, KWU, Offenbach, Germany]*

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WANG, Z.Y., HSU, Y.Y., ALMENAS, K., DI MARZO, M., On the applicability of Ishii's similarity parameters to integral system test facilities *[Univ. Maryland, College Park, MD, USA]*

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SESHADRI, B.S., VENKATESAN, R., Transmission characteristics of Cf^{252} neutrons passing through rare earth and boron loaded concrete slab shields *[Indira Gandhi Ctr. Atom Res., Kalpakkam, India]*

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BECKER, G., STEFFEN, G., NOTHEISEN, C., The design of the prestressed concrete reactor vessel for gas-cooled heating reactors *[Bonnard & Gardel Ing. SA, Lausanne, Switzerland; Hochtemperatur Reaktorbau GmbH, Mannheim, Germany; Sulzer AG, Winterthur, Switzerland]*

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AKIYAMA, M., INOUE, A., OHISHI, M., MOROOKA, S., HOSHIDE, A., ISHIZUKA, T., YOSHIMURA, K., Study on post-BT heat transfer in a full scale BWR (8×8) rod bundle *[Nucl. Power Engn. Test Ctr., Tokyo, Japan; Tokyo Inst. Technol., Tokyo, Japan; Toshiba Co. Ltd., Yokohama, Kanagawa, Japan; Univ. Tokyo, Tokyo, Japan]*

Vol. 117 No. 3 (1989) 349-355
CHEVERTON, R.D., KAM, F.B., NANSTAD, R.K., ROBINSON, G.C., An embrittlement rate effect deduced from HFIR that may impact LWR vessel support life expectancy *[Oak Ridge Natl. Lab., Oak Ridge, TN, USA]*

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PRZYBILLA, H.-J., Geometrical quality control of fuel elements – a procedure for high precision underwater photogrammetry compared with common measuring techniques *[Rhein Westfal Elekt. Werk AG, Essen, Germany]*

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STEINBOCK, L., Tomography of nuclear fuel experiments with an electronic line scan camera *[KFZ Karlsruhe GmbH, Karlsruhe, Germany]*

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SCHMOCKER, U., GILLI, R., Safety goals and design criteria for small heating reactors *[Swiss Fed. Nucl. Safety Inspectorate, Wurenlingen, Switzerland]*

Vol. 118 No. 1 (1990) 21-28
VON BÖCKH, P., SVOBODA, R., Improvement of the plant availability and of the erosion corrosion with the retrofit of pre- and crossunder pipe separators *[ASEA Brown Boveri AG, Baden, Switzerland]*

Vol. 118 No. 1 (1990) 29-41
TALJA, A., HANSJOSTEN, E., Results of thermal stratification tests in a horizontal pipe line at the HDR facility *[KFA Jülich GmbH, Karlsruhe, Germany; Tech. Res. Ctr. Finland, Espoo, Finland]*

Vol. 118 No. 1 (1990) 43-53
WAHBA, A.B., International activities for the analysis of the TMI-2 accident with special consideration of ATHLET calculations *[Ges. Reaktorsicherheit GmbH, Garching, Germany]*

Vol. 118 No. 1 (1990) 55-59
MAYR, P., BÜRGER, M., HOCKE, K.-D., SCHATZ, A., UNGER, H., Core heat-up and thermal behavior of the upper plenum structures affected by free convective gas flows in PWRs *[Univ. Stuttgart, Stuttgart, Germany]*

Vol. 118 No. 1 (1990) 61-70
AXMANN, J.K., KLÜVER, B., OLDEKOP, W., PELLONI, S., The influence of nuclear cross section data bases on the neutron physics of high converting PWRs *[Paul Scherrer Inst., Wurenlingen, Switzerland; Tech. Univ. Braunschweig, Braunschweig, Germany]*

Vol. 118 No. 1 (1990) 71-76
JONAS, R., SCHÜTZ, W., REETZ, A., Model calculations and experimental verification of the bubble behaviour in a Bethe-Tait accident *[Interatom GmbH, Bergisch Gladbach, Germany; KFZ Karlsruhe GmbH, Karlsruhe, Germany]*

Vol. 118 No. 1 (1990) 77-86
BÖSE, H., RÖSS, P., UNGER, H., ZIEGLER, A., Theoretical and experimental thermal-hydraulic analysis of a new sodium-cooled fast breeder reactor core *[Ruhr Univ. Bochum, Bochum, Germany]*

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WEGENER, H., FREUND, H.U., SCHUMANN, ST., Explosive cutting of thick-walled steel pipes in the reactor HDR *[Battelle Inst. eV, Frankfurt, Germany; KFZ Karlsruhe GmbH, Karlsruhe, Germany]*

Vol. 118 No. 1 (1990) 99-106
CLOSS, K.D., ENGELMANN, H.J., Status of the FRG activities on direct disposal of spent LWR-fuel *[Deutsche Ges. Bau & Betrieb Endlagern Abfallstoffe mbH, Peine, Germany; KFZ Karlsruhe GmbH, Karlsruhe, Germany]*

Vol. 118 No. 1 (1990) 107-113
BRINKMANN, H.U., DUWE, R., GANSER, B., MEHNER, A.-W., REBMANN, A., Contributions towards the development of a packaging concept for the final disposal of spent HTGR pebble bed fuel *[KFA Jülich GmbH, Jülich, Germany; Nukem GmbH, Hanau, Germany]*

Vol. 118 No. 1 (1990) 115-122
GRÄBENER, K.-H., VON KOCH, C., NICKEL, W., Volume reduction, treatment and recycling of radioactive waste *[No address]*

Vol. 118 No. 1 (1990) 123-131
WÜRZ, H., WAGNER, K., BECKER, H.J., Nondestructive determination of residual fuel on leached hulls and dissolver sludges from LWR fuel reprocessing *[KFA Jülich GmbH, Karlsruhe, Germany; WAK Betriebsgesellsch., Karlsruhe, Germany]*

Vol. 118 No. 1 (1990) 133-136
SCHEIBEL, H.G., FRIEHMELT, V., FRÖHLICH, H., The fracture and aerosol release of impacted HLW-glasses due to accidental canister drops in a disposal site *[Battelle Inst. eV, Frankfurt, Germany]*

Vol. 118 No. 2 (1990) 141-154
MURATA, H., IYORI, I., KOBAYASHI, M., Natural circulation characteristics of a marine reactor in rolling motion *[Minist. Transport, Ship Res. Inst., Tokyo, Japan]*

Vol. 118 No. 2 (1990) 155-162
ZUN, I., The mechanism of bubble non-homogeneous distribution in two-phase shear flow *[Edvard Kardelj Univ., Ljubljana, Slovenia]*

Vol. 118 No. 2 (1990) 163-178
DEPIANTE, E.V., MEYER, J.E., Parity simulation of a boiling water reactor system *[MIT, Cambridge, MA, USA]*

Vol. 118 No. 2 (1990) 179-192
MAURO, G., SALA, M., HETSRONI, G., Improved Italian Moisture Separators (IIMS) *[Ansaldo Componenti S.p.A., Milan, Italy; Ente Nazl. Energia Atom, Rome, Italy; Technion Israel Inst. Technol., Haifa, Israel]*

Vol. 118 No. 2 (1990) 193-212
KIM, M.H., CORRADINI, M.L., Modeling of condensation heat transfer in a reactor containment *[Pohang Inst. Sci. & Technol., Pohang, South Korea; Univ. Wisconsin, Madison, WI, USA]*

Vol. 118 No. 2 (1990) 213-218
YOKOMIZO, O., MASUHARA, Y., YOSHIMOTO, Y., An on-line method to monitor BWR core stability based on an autocorrelation method *[Hitachi Ltd., Hitachi, Ibaraki, Japan]*

Vol. 118 No. 2 (1990) 219-226
NOVICK, V.J., PILAT, M.J., Gas and aerosol sampling from high temperature, transient pressure environments *[Univ. Washington, Seattle, WA, USA]*

Vol. 118 No. 2 (1990) 227-241
SATO, S., HIRAKAWA, K., KURUMADA, A., KIMURA, S., YASUDA, E., Degradation of fracture mechanics properties of reactor graphite due to burn-off *[Ibaraki Univ., Hitachi, Ibaraki, Japan; Tokyo Inst. Technol., Yokohama, Kanagawa, Japan]*

Vol. 118 No. 2 (1990) 243-252
HENSSEN, J., MAUERSBERGER, R., Experimental optimization of the temperature distribution in the hot-gas duct through the installation of internals in the hot-gas plenum of a high-temperature reactor *[Hochtemperatur Reaktorbau GmbH, Jülich, Germany]*

Vol. 118 No. 2 (1990) 253-258
FRÖNING, H., Safety concept for an HTR liner design for combined stress and strain-controlled load *[Hochtemperatur Reaktorbau GmbH, Mannheim, Germany]*

Vol. 118 No. 2 (1990) 259-265
ALBERT, K., BORKOWSKI, F., SCHOLZ, A., WAHSWEILER, H.G., Application of new calculation methods to the primary shielding of the AVR experimental reactor *[Hochtemperatur Reaktorbau GmbH, Mannheim, Germany]*

Vol. 118 No. 2 (1990) 267-271
KARWAT, H., Ignitors to mitigate the risk of hydrogen explosions – a critical review *[Tech. Univ. Munich, Munich, Germany]*

Vol. 118 No. 3 (1990) 283-295
NAUS, D.J., BASS, B.R., KEENEY-WALKER, J., FIELDS, R.J., DE WIT, R., LOW, S.R. (III), HSST wide-plate test results and analysis *[Natl. Inst. Stand & Technol., Gaithersburg, MD, USA; Oak Ridge Natl. Lab., Oak Ridge, TN, USA]*

Vol. 118 No. 3 (1990) 297-304
HAGGAG, F.M., ISKANDER, S.K., Results of irradiated cladding tests and clad plate experiments *[Oak Ridge Natl. Lab., Oak Ridge, TN, USA]*

Vol. 118 No. 3 (1990) 305-318
KOT, C.A., SRINIVASAN, M.G., HSIEH, B.J., MALCHER, L., SCHRAMMEL, D., STEINHILBER, H., COSTELLO, J.F., SHAM: high-level seismic tests of piping at the HDR *[Argonne Natl. Lab., Argonne, IL, USA; Fraunhofer Inst. Betriebsfestigkeit, Darmstadt, Germany; KFZ Karlsruhe GmbH, Karlsruhe, Germany; US Nucl. Regulatory Commiss., Washington, DC, USA]*

Vol. 118 No. 3 (1990) 319-327
ALLEN, R.P., JOHNSON, A.B. (JR.), Lessons learned to date from the Shippingport aging evaluation *[Battelle Mem. Inst., Pacific Northwestern Labs, Richland, WA, USA]*

Vol. 118 No. 3 (1990) 329-342
SHAH, V.N., WARE, A.G., CONLEY, D.A., MACDONALD, P.E., BURNS, J.J. (JR.), Aging assessment of PWR surge and spray lines and LWR coolant pumps *[EG&G Idaho Inc., Idaho Natl. Engn. Lab., Idaho Falls, ID, USA; US Nucl. Regulatory Commiss., Washington, DC, USA]*

Vol. 118 No. 3 (1990) 343-354
VORA, J.P., Potential application of NRC aging research to license renewal *[US Nucl. Regulatory Commiss., Washington, DC, USA]*

Vol. 118 No. 3 (1990) 355-358
DOCTOR, S.R., BOYD, D.M., BRUEMMER, S.M., Assessment of nondestructive measurement techniques to quantify material property degradation due to aging in light water reactor environments *[Battelle Mem. Inst., Pacific Northwestern Labs, Richland, WA, USA]*

Vol. 118 No. 3 (1990) 359-374
DOCTOR, S.R., DEFFENBAUGH, J.D., GOOD, M.S., GREEN, E.R., HEASLER, P.G., REID, L.D., SIMONEN, F.A., SPANNER, J.C., TAYLOR, T.T., VO, T.V., NDE reliability and SAFT-UT final development *[Battelle Mem. Inst., Pacific Northwestern Labs, Richland, WA, USA]*

Vol. 118 No. 3 (1990) 375-380
LOFARO, R., GUNTHER, W., SUBUDHI, M., TAYLOR, J., Nuclear plant aging study of residual heat removal systems *[Brookhaven Natl. Lab., Upton, NY, USA]*

Vol. 118 No. 3 (1990) 381-387
SHIER, W., FULLWOOD, R., PRAAGE88: an interactive IBM-PC code for aging analysis of NUREG-1150 systems *[Brookhaven Natl. Lab., Upton, NY, USA]*

Vol. 118 No. 3 (1990) 389-398
MEYER, L.C., MAGLEBY, H.L., Nuclear plant aging research on the high-pressure injection system *[EG&G Idaho Inc., Idaho Natl. Engn. Lab., Idaho Falls, ID, USA]*

Vol. 118 No. 3 (1990) 399-408
HAYNES, H.D., Application of signature analysis for determining the operational readiness of motor-operated valves under blowdown test conditions *[Oak Ridge Natl. Lab., Oak Ridge, TN, USA]*

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KRYTER, R.C., Nonintrusive methods for monitoring the operational readiness of solenoid-operated valves *[Oak Ridge Natl. Lab., Oak Ridge, TN, USA]*

Vol. 118 No. 3 (1990) 419-429
DE WALL, K.G., Early results of gate valve flow interruption blowdown tests *[EG&G Idaho Inc., Idaho Natl. Engn. Lab., Idaho Falls, ID, USA]*

Vol. 118 No. 3 (1990) 431-440
STEELE, R. (JR.), DE WALL, K.G., WEIDENHAMER, G.H., WOODS, H.W., Full scale valve qualification and flow interruption testing provides insights on industry motor operator sizing shortcomings and diagnostic testing limitations *[EG&G Idaho Inc., Idaho Natl. Engn. Lab., Idaho Falls, ID, USA; US Nucl. Regulatory Commiss., Washington, DC, USA]*

Vol. 118 No. 3 (1990) 441-449
MCCARDELL, R.K., RUSSELL, M.L., AKERS, D.W., OLSEN, C.S., Summary of TMI-2 core sample examinations *[EG&G Idaho Inc., Idaho Natl. Engn. Lab., Idaho Falls, ID, USA]*

Vol. 118 No. 3 (1990) 451-461
AKERS, D.W., MCCARDELL, R.K., RUSSELL, M.L., WORKU, G., TMI-2 core materials and fission product inventory *[EG&G Idaho Inc., Idaho Natl. Engn. Lab., Idaho Falls, ID, USA; Grove Engn. Inc., Rockville, MD, USA]*

Vol. 118 No. 3 (1990) 463-486
ROBERTSON, D.E., THOMAS, C.W., WYNHOFF, N.L., HETZER, D.C., Characterization of long-lived activation products in spent fuel assembly hardware and reactor pressure vessel steel *[Battelle Mem. Inst., Pacific Northwestern Labs, Richland, WA, USA]*

Vol. 118 No. 3 (1990) 487-496
DUCE, S.W., Effectiveness and safety aspects of selected decontamination methods for LWRs - Recontamination Experience 1988 *[EG&G Idaho Inc., Idaho Natl. Engn. Lab., Idaho Falls, ID, USA]*

Vol. 118 No. 3 (1990) 497-503
JACOBUS, M.J., Condition monitoring methods applied to Class 1E cables *[Sandia Natl. Labs, Albuquerque, NM, USA]*

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MOPSIK, F.I., MARTZLOFF, F.D., Time domain spectroscopy to monitor the condition of cable insulation *[Natl. Inst. Stand & Technol., Gaithersburg, MD, USA]*

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BOYACK, B.E., CATTON, I., DUFFEY, R.B., GRIFFITH, P., KATSMA, K.R., LELLOUCHE, G.S., LEVY, S., ROHATGI, U.S., WILSON, G.E., WULFF, W., ZUBER, N., Quantifying reactor safety margins. 1. An overview of the code scaling, applicability, and uncertainty evaluation methodology *[Brookhaven Natl. Lab., Upton, NY, USA; EG&G Idaho Inc., Idaho Natl. Engn. Lab., Idaho Falls, ID, USA; MIT, Cambridge, MA, USA; S. Levy Inc., Campbell, CA, USA; US Nucl. Regulatory Commiss., Washington, DC, USA; Univ. Calif. Los Alamos Sci. Lab., Los Alamos, NM, USA; Univ. Calif. Los Angeles, Los Angeles, CA, USA]*

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WILSON, G.E., BOYACK, B.E., CATTON, I., DUFFEY, R.B., GRIFFITH, P., KATSMA, K.R., LELLOUCHE, G.S., LEVY, S., ROHATGI, U.S., WULFF, W., ZUBER, N., Quantifying reactor safety margins. 2. Characterization of important contributors to uncertainty *[Brookhaven Natl. Lab., Upton, NY, USA; EG&G Idaho Inc., Idaho Natl. Engn. Lab., Idaho Falls, ID, USA; MIT,*

Cambridge, MA, USA; S. Levy Inc., Campbell, CA, USA; US Nucl. Regulatory Commiss., Washington, DC, USA; Univ. Calif. Los Alamos Sci. Lab., Los Alamos, NM, USA; Univ. Calif. Los Angeles, Los Angeles, CA, USA]

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WULFF, W., BOYACK, B.E., CATTON, I., DUFFEY, R.B., GRIFFITH, P., KATSMA, K.R., LELLOUCHE, G.S., LEVY, S., ROHATGI, U.S., WILSON, G.E., ZUBER, N., Quantifying reactor safety margins. 3. Assessment and ranging of parameters *[Brookhaven Natl. Lab., Upton, NY, USA; EG&G Idaho Inc., Idaho Natl. Engn. Lab., Idaho Falls, ID, USA; MIT, Cambridge, MA, USA; S. Levy Inc., Campbell, CA, USA; US Nucl. Regulatory Commiss., Washington, DC, USA; Univ. Calif. Los Alamos Sci. Lab., Los Alamos, NM, USA; Univ. Calif. Los Angeles, Los Angeles, CA, USA]*

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LELLOUCHE, G.S., LEVY, S., BOYACK, B.E., CATTON, I., DUFFEY, R.B., GRIFFITH, P., KATSMA, K.R., MAY, R., ROHATGI, U.S., WILSON, G., WULFF, W., ZUBER, N., Quantifying reactor safety margins. 4. Uncertainty evaluation of LBLOCA analysis based on TRAC-PF1/MOD 1 *[Brookhaven Natl. Lab., Upton, NY, USA; EG&G Idaho Inc., Idaho Natl. Engn. Lab., Idaho Falls, ID, USA; S. Levy Inc., Campbell, CA, USA; US Nucl. Regulatory Commiss., Washington, DC, USA; Univ. Calif. Los Alamos Sci. Lab., Los Alamos, NM, USA; Univ. Calif. Los Angeles, Los Angeles, CA, USA]*

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ZUBER, N., WILSON, G.E., BOYACK, B.E., CATTON, I., DUFFEY, R.B., GRIFFITH, P., KATSMA, K.R., LELLOUCHE, G.S., LEVY, S., ROHATGI, U.S., WULFF, W., Quantifying reactor safety margins. 5. Evaluation of scale-up capabilities of best estimate codes *[Brookhaven Natl. Lab., Upton, NY, USA; EG&G Idaho Inc., Idaho Natl. Engn. Lab., Idaho Falls, ID, USA; MIT, Cambridge, MA, USA; S. Levy Inc., Campbell, CA, USA; US Nucl. Regulatory Commiss., Rockville, MD, USA; Univ. Calif. Los Alamos Sci. Lab., Los Alamos, NM, USA; Univ. Calif. Los Angeles, Los Angeles, CA, USA]*

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CATTON, I., DUFFEY, R.B., SHAW, R.A., BOYACK, B.E., GRIFFITH, P., KATSMA, K.R., LELLOUCHE, G.S., LEVY, S., ROHATGI, U.S., WILSON, G.E., WULFF, W., ZUBER, N., Quantifying reactor safety margins. 6. A physically based method of estimating PWR large break loss of coolant accident PCT *[Brookhaven Natl. Lab., Upton, NY, USA; EG&G Idaho Inc., Idaho Natl. Engn. Lab., Idaho Falls, ID, USA; MIT, Cambridge, MA, USA; S. Levy Inc., Campbell, CA, USA; US Nucl. Regulatory Commiss., Washington, DC, USA; Univ. Calif. Los Alamos Sci. Lab., Los Alamos, NM, USA; Univ. Calif. Los Angeles, Los Angeles, CA, USA]*

Vol. 119 No. 2-3 (1990) 121-130
DARLASTON, B.J., GARDNER, W.E., A review of the UK PWR structural integrity and materials programme *[Berkeley Nucl. Labs, Berkeley, Glos, England; UKAEA Technol., Warrington, Cheshire, England]*

Vol. 119 No. 2-3 (1990) 131-137
MAILE, K., KLENK, A., OBST, V., STURM, D., Load carrying behaviour of the primary system of PWRs for loads beyond the design limits. 2. Creep and failure behavior of a piping section under internal pressure and high temperature *[Staatliche Materialprüfungsanstalt, Stuttgart, Germany]*

Vol. 119 No. 2-3 (1990) 139-148
ISHINO, S., KAWAKAMI, T., HIDAKA, T., SATOH, M., The effect of chemical composition on irradiation embrittlement *[Japan Power Engn. & Inspect. Corp., Tokyo, Japan; Mitsubishi Heavy Ind. Co. Ltd., Takasago, Hyogo, Japan; Univ. Tokyo, Tokyo, Japan]*

Vol. 119 No. 2-3 (1990) 149-176
KASTL, H., NARAGHI, M., Material laws for inelastic analyses on elbows of 12% or 0.5% Cr-steel up to creep rupture for 30000 h creep tests at 550 °C *[Interatom GmbH, Bergisch Gladbach, Germany]*

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OKU, T., KODAIRA, T., FUKAYA, K., SUZUKI, M., TANAKA, Y., IWADATE, T., SUZUKI, K., SATO, I., Study on 2 1/4Cr-1 Mo steel for high temperature gas cooled reactor material characterization of forged low Si2 1/4Cr-1 Mo steel *[Japan Atom Energy Res. Inst., Chiyoda Ku, Japan; Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan; Japan Steel Works Ltd., Muroran, Japan]*

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BLIND, D., OBST, V., MAILE, K., KESSLER, K.J., VAZOUKIS, G., Evaluation of design values for strain limitation on the basis of cyclic fatigue data *[Siemens AG, KWU, Erlangen, Germany; Staatliche Materialprüfungsanstalt, Stuttgart, Germany]*

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DIEHL, H., BODMANN, E., Alloy 800: new stress rupture and creep data for pressurized components in high temperature reactors *[Hochtemperatur Reaktorbau GmbH, Mannheim, Germany]*

Vol. 119 No. 2-3 (1990) 207-213
DIEHL, H., BLUME-FIRLA, I., MERGLER, W., Alloy 800: low cycle fatigue curves as the basis for design against fatigue failure of HTR components *[Hochtemperatur Reaktorbau GmbH, Mannheim, Germany]*

Vol. 119 No. 2-3 (1990) 215-222
KULLIK, M., MAILE, K., Estimation of crack growth in the creep range during plastic cyclic loading *[Univ. Stuttgart, Staatliche Materialprüfungsanstalt, Stuttgart, Germany]*

Vol. 119 No. 2-3 (1990) 223-230
GNIRSS, G., HARTNAGEL, W., TRÜCK, B., Influence of damage mechanisms on the creep crack growth behaviour of X20CrMoV 12-1 at 550 °C *[ASEA Brown Boveri AG, Mannheim, Germany]*

Vol. 119 No. 2-3 (1990) 231-238
SCHNEIDER, K., TOLKSDORF, E., GNIRSS, G., Analysis of the deformation and damage development of a dissimilar weld operating in the creep regime *[ASEA Brown Boveri AG, Mannheim, Germany; VGB, Essen, Germany]*

Vol. 119 No. 2-3 (1990) 239-247
MIKSCH, M., SCHÜCKTANZ, G., Evaluation of fatigue of reactor components by on-line monitoring of transients *[Siemens AG, KWU, Erlangen, Germany]*

Vol. 119 No. 2-3 (1990) 249-261
BETHMONT, M., ROUSSELIER, G., KUSSMAUL, K., SAUTER, A., JOVANOVIC, A., The method of "local approach of fracture" and its application to a thermal shock experiment *[Elect. France, Dept. Nucl. Reactors & Heat Exchangers, Moret sur Loing, France; Staatliche Materialprüfungsanstalt, Stuttgart, Germany]*

Vol. 119 No. 2-3 (1990) 263-279
JOVANOVIC, A., LUCIA, A.C., Analysis of crack behaviour in the JRC Ispra pressurized thermal-shock experiment *[Commiss. European Communities, Euratom, Joint Res. Ctr., Ispra, Italy;*

Univ. Stuttgart, Staatliche Materialprüfungsanstalt, Stuttgart, Germany]

Vol. 119 No. 2-3 (1990) 281-286
STEGMEYER, R., SAUTER, A., HÖFLER, A., SIEVERS, J., KORDISCH, H., 3D-FE-calculations of a pressure vessel under thermal shock loading *[Fraunhofer Inst. Werkstoffmech., Freiburg, Germany; Ges. Reaktorsicherheit GmbH, Cologne, Germany; Staatliche Materialprüfungsanstalt, Stuttgart, Germany]*

Vol. 119 No. 2-3 (1990) 287-305
SAUTER, A., NGUYEN-HUY, T., WEBER, U., HUBER, H., Behaviour of surface flaws under thermal mechanical loading *[Univ. Stuttgart, Staatliche Materialprüfungsanstalt, Stuttgart, Germany]*

Vol. 119 No. 2-3 (1990) 307-315
BROCKS, W., KÜNECKE, G., Elastic-plastic fracture mechanics analysis of a pressure vessel with an axial outer surface flaw *[Bundesanstalt Materialprüfung, Berlin, Germany]*

Vol. 119 No. 2-3 (1990) 317-327
KATZENMEIER, G., KUSSMAUL, K., ROOS, E., DIEM, H., Component testing at the HDR-facility for validating the calculation procedures and the transferability of test results from specimen to component *[KFZ Karlsruhe GmbH, Karlsruhe, Germany; Staatliche Materialprüfungsanstalt, Stuttgart, Germany]*

Vol. 119 No. 2-3 (1990) 329-335
VINZENS, K., LAUE, H., HOSEMANN, B., Structural integrity of LMFBRs including leak before break *[Interatom GmbH, Bergisch Gladbach, Germany]*

Vol. 119 No. 2-3 (1990) 337-345
BHANDARI, S., NESA, D., FAIDY, C., GRÜTER, L., Initiation and instability behaviour of cracked LMFBR piping: comparison of different theoretical approaches and experiments *[Elect. France, Serv. Etud. & Projets Therm. & Nucl., Villeurbanne, France; Interatom GmbH, Bergisch Gladbach, Germany; Novatome, Lyon, France]*

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UHLMANN, D., DIEM, H., BROSI, S., Fracture mechanics study of a pipe bend with a longitudinal crack under static loading *[Paul Scherrer Inst., Villigen, Switzerland; Staatliche Materialprüfungsanstalt, Stuttgart, Germany]*

Vol. 119 No. 2-3 (1990) 361-370
KERKHOF, K., STOPPLER, W., STURM, D., ZIRN, R., Resonant excitation of a pipe section *[Univ. Stuttgart, Staatliche Materialprüfungsanstalt, Stuttgart, Germany]*

Vol. 119 No. 2-3 (1990) 371-378
TENCKHOFF, E., ERVE, M., LENZ, E., VAZOUKIS, G., Environmentally assisted crack growth in low-alloy steels - Results and their relevance to LWR components *[Siemens AG, KWU, Erlangen, Germany]*

Vol. 119 No. 2-3 (1990) 379-388
VAN DER SLUYS, W.A., EMANUELSON, R.H., Fatigue crack growth in reactor pressure vessel materials and light water reactor environments *[Babcock & Wilcox Co., Alliance, OH, USA]*

Vol. 119 No. 2-3 (1990) 389-398
HAKALA, J., HÄNNINEN, H., AALTONEN, P., Stress corrosion and thermal fatigue - Experiences and countermeasures in austenitic SS pipings of Finnish BWR plants *[Imatra Power Co., Olkiluoto, Finland]*

Vol. 119 No. 2-3 (1990) 399-413
SCOTT, P.M., TICE, D.R., Stress corrosion in low alloy steels *[UKAEA Technol., Harwell Lab., Harwell, Oxon, England; UKAEA Technol., North Res. Labs, Preston, Lancs, England]*

Vol. 119 No. 2-3 (1990) 415-430
KUSSMAUL, K., ISKLUTH, B., Environmentally assisted crack growth in a low alloy boiler steel in high temperature water containing oxygen *[Univ. Stuttgart, Staatliche Materialprüfungsanstalt, Stuttgart, Germany]*

Vol. 119 No. 2-3 (1990) 431-438
KASTNER, W., ERVE, M., HENZEL, N., STELLWAG, B., Calculation code for erosion corrosion induced wall thinning in piping systems *[Siemens AG, KWU, Erlangen, Germany]*

Vol. 119 No. 2-3 (1990) 439-445
HOFMANN, P.J., SCHETTLER, T., WIELING, N., STEININGER, D.A., Influence of contact conditions on vibration induced wear of metals *[Elect. Power Res. Inst., Palo Alto, CA, USA; Siemens AG, KWU, Erlangen, Germany]*

Vol. 119 No. 2-3 (1990) 447-457
THEYMANN, W., ENGEL, R., DEMUS, H., Ceramic coatings for protection against frictional wear and diffusion welding in HTR helium *[Hochtemperatur Reaktorbau GmbH, Mannheim, Germany]*

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HÜBSCHEN, G., LÖHR, E., WALLESER, A., Monitoring the filling level of the RPV using stationary EMUS probes *[Siemens AG, KWU, Offenbach, Germany; Univ. Saarbrücken, Fraunhofer Inst. Zerstörungsfreie Prüfverfahren, Saarbrücken, Germany]*

Vol. 119 No. 2-3 (1990) 467-473
HAJDUK, M., MEWES, D., The measurement of transient deformation by double pulsed interferometry, a method for nondestructive testing *[Univ. Hannover, Hannover, Germany]*

Vol. 119 No. 2-3 (1990) 475-490
CRUTZEN, S., HERKENRATH, H., KUSSMAUL, K., MLETZKO, U., PISC full scale reactor pressure vessel validation of non-destructive examination *[Commiss. European Communities, Euratom, Joint Res. Ctr., Ispra, Italy; Univ. Stuttgart, Staatliche Materialprüfungsanstalt, Stuttgart, Germany]*

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OYAMADA, O., SAITO, H., MURAMATSU, Y., HASEGAWA, T., TANAKA, N., Experimental study of the structural behaviour of the reinforced concrete containment vessel beyond design pressure *[Hitachi Ltd., Hitachi, Ibaraki, Japan; Shimizu Corp., Tokyo, Japan; Tokyo Elect. Power Co. Ltd., Tokyo, Japan; Toshiba Co. Ltd., Yokohama, Kanagawa, Japan]*

Vol. 120 No. 1 (1990) 15-23
EBERLE, F., GÖLLER, B., KRIEG, R., Comparison between calculated and measured eigenfrequencies for spherical steel containment shells *[KFZ Karlsruhe GmbH, Karlsruhe, Germany]*

Vol. 120 No. 1 (1990) 25-34
PFEIFFER, P.A., KENNEDY, J.M., MARCHERTAS, A.H., Thermal effects in the overpressurization response of reinforced concrete containment *[Argonne Natl. Lab., Argonne, IL, USA; North Illinois Univ., De Kalb, IL, USA]*

Vol. 120 No. 1 (1990) 35-42
HORSCHEL, D.S., Synopsis of the results from overpressurizing a reinforced concrete containment model *[Sandia Natl. Labs, Albuquerque, NM, USA]*

Vol. 120 No. 1 (1990) 43-55
WEATHERBY, J.R., Post-test analysis of a piping penetration in a 1: 6 scale model of a reinforced concrete containment building *[Sandia Natl. Labs, Albuquerque, NM, USA]*

Vol. 120 No. 1 (1990) 57-65
FINESCHI, F., CARCASSI, M., CARNASCIALI, F., Inerting and venting of Mark II containments in BWR nuclear plants *[Univ. Pisa, Pisa, Italy]*

Vol. 120 No. 1 (1990) 67-74
TUOMISTO, H., HONGISTO, O., Ice melting progress in a nonuniformly loaded ice condenser facility *[Imatra Power Co., Vantaa, Finland]*

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GREENE, S.R., The role of BWR secondary containments in severe accident mitigation: issues and insights from recent analyses *[Oak Ridge Natl. Lab., Oak Ridge, TN, USA]*

Vol. 120 No. 1 (1990) 87-91
DE BOECK, B., Severe accident risk reduction by containment leakage testing during operation *[AIB Vincotte, Brussels, Belgium]*

Vol. 120 No. 1 (1990) 93-103
SCHLUETER, R.O., SCHMITZ, R.P., Filtered vented containments *[Bechtel Power Corp., San Francisco, CA, USA]*

Vol. 120 No. 1 (1990) 105-113
EDWARDS, N.W., Proposed acceptance criteria for severe accident evaluations of steel containment vessels *[NWE Serv. Inc., Morgan Hill, CA, USA]*

Vol. 120 No. 1 (1990) 115-121
DAVIS, G.A., MATZIE, R.A., GREEN, M.D., BREWER, H.D., FOX, W.A., Design considerations for severe accident containment performance *[Combust. Engn. Inc., Windsor, CT, USA; Duke Power Co., Charlotte, NC, USA]*

Vol. 120 No. 1 (1990) 123-131
SAMMATARO, R.F., Containment long-term operational integrity *[Gen. Dynam. Corp., Div. Elect. Boat, Groton, CT, USA]*

Vol. 120 No. 2-3 (1990) 135-146
SUDO, Y., KAMINAGA, M., MINAZOE, K., Experimental study on the effects of channel gap size on mixed convection heat transfer characteristics in vertical rectangular channels heated from both sides *[Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan; Nippon Kokan KK, Kawasaki, Kanagawa, Japan]*

Vol. 120 No. 2-3 (1990) 147-161
SUGAWARA, S., MIYAMOTO, Y., FIDAS: Detailed subchannel analysis code based on the three-fluid and three-field model *[Power Reactor & Nucl. Fuel Dev. Corp., Oarai, Ibaraki, Japan; SEA Corp., Tokyo, Japan]*

Vol. 120 No. 2-3 (1990) 163-180
KATAOKA, I., SERIZAWA, A., Interfacial area concentration in bubbly flow *[Kyoto Univ., Kyoto, Japan]*

Vol. 120 No. 2-3 (1990) 181-192
WATANABE, T., HIRANO, M., TANABE, F., KAMO, H., The effect of the virtual mass force term on the numerical stability and efficiency of system calculations *[Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan; Japan Informat. Serv. Ltd., Tokyo, Japan]*

Vol. 120 No. 2-3 (1990) 193-201
MADARAME, H., CHIBA, T., Gas entrainment inception at the border of a flow-swollen liquid surface *[Univ. Tokyo, Tokyo, Japan]*

Vol. 120 No. 2-3 (1990) 203-212
MITSUTAKE, T., MOROOKA, S., SUZUKI, K., TSUNOYAMA, S., YOSHIMURA, K., Void fraction estimation within rod bundles based on three-fluid model and comparison with X-ray CT void data *[Nippon Atom Ind. Grp. Co. Ltd., Kawasaki, Kanagawa, Japan; Toshiba Co. Ltd., Yokohama, Kanagawa, Japan]*

Vol. 120 No. 2-3 (1990) 213-225
ISHIDA, I., KUSUNOKI, T., MURATA, H., YOKOMURA, T., KOBAYASHI, M., NARIAI, H., Thermal-hydraulic behavior of a marine reactor during oscillations *[Japan Atom Energy Res. Inst., Mutsu, Aomori, Japan; Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan; Ship Res. Inst., Tokyo, Japan; Univ. Tsukuba, Sakura, Ibaraki, Japan]*

Vol. 120 No. 2-3 (1990) 227-239
MUTO, S., YOKOMIZO, O., YOSHIMOTO, Y., FUKAHORI, T., EBATA, S., Space-dependent analysis of BWR core nuclear thermal hydraulic instability and thermal margin *[Hitachi Ltd., Hitachi, Ibaraki, Japan; Hitachi Ltd., Tokyo, Japan; Tokyo Elect. Power Co. Ltd., Tokyo, Japan; Toshiba Co. Ltd., Tokyo, Japan]*

Vol. 120 No. 2-3 (1990) 241-248
MIURA, S., KAMITSUMA, N., MORIYA, K., SUGISAKI, T., Simulation tests of BWR non-LOCA transients using the TBL *[Hitachi Ltd., Hitachi, Ibaraki, Japan]*

Vol. 120 No. 2-3 (1990) 249-257
KUKITA, Y., ASAKA, H., NAKAMURA, H., TASAKA, K., Pressurized water reactor core instrument tube ruptures: Experimental simulation at the ROSA-IV LSTF *[Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan]*

Vol. 120 No. 2-3 (1990) 259-269
KAWANISHI, K., TSUGE, A., KUWABARA, K., UKAI, O., NAKAMORI, N., Small break LOCA experiments and verification of CANAC-II code *[Mitsubishi Heavy Ind. Co. Ltd., Takasago, Hyogo, Japan]*

Vol. 120 No. 2-3 (1990) 271-280
SAKURAI, A., SHIOTSU, M., HATA, K., Correlations for subcooled pool film boiling heat transfer from large surfaces with different configurations *[Kyoto Univ., Kyoto, Japan]*

Vol. 120 No. 2-3 (1990) 281-291
ARITOMI, M., INOUE, A., AOKI, S., HANAWA, K., Thermo-hydraulic behavior of inverted annular flow *[Tokyo Inst. Technol., Tokyo, Japan; Toshiba Co. Ltd., Yokohama, Kanagawa, Japan]*

Vol. 120 No. 2-3 (1990) 293-300
TAKENAKA, N., AKAGAWA, K., FUJII, T., NISHIDA, K., Experimental study on flow pattern and heat transfer of inverted annular flow *[Kobe Univ., Kobe, Hyogo, Japan]*

Vol. 120 No. 2-3 (1990) 301-310
KOIZUMI, Y., ANODA, Y., KUMAMARU, H., YONOMOTO, T., TASAKA, K., High pressure reflooding experiments of multi-rod bundle at ROSA-IV TPTF *[Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan]*

Vol. 120 No. 2-3 (1990) 311-321
MUTO, S., ANEGAWA, T., MOROOKA, S., YOKOBORI, S., TAKIGAWA, Y., EBATA, S., YOSHIMOTO, Y., SUZUKI, S., An experimental study on rewetting phenomena in transient conditions of BWRs *[Hitachi Ltd., Hitachi, Ibaraki, Japan; Hitachi Ltd., Tokyo, Japan; Nippon Atom Ind. Grp. Co. Ltd., Kawasaki, Kanagawa, Japan; Tokyo Elect. Power Co. Ltd., Tokyo, Japan; Toshiba Co. Ltd., Tokyo, Japan]*

Vol. 120 No. 2-3 (1990) 323-339
MAEKAWA, I., Numerical diffusion in single-phase multi-dimensional thermal-hydraulic analysis *[Power Reactor & Nucl. Fuel Dev. Corp., Oarai, Ibaraki, Japan]*

Vol. 120 No. 2-3 (1990) 341-347
SAWADA, M., ARIKAWA, H., MIZOO, N., Experiment and analysis on natural convection characteristics in the experimental fast reactor JOYO *[Power Reactor & Nucl. Fuel Dev. Corp., Oarai, Ibaraki, Japan]*

Vol. 120 No. 2-3 (1990) 349-367
NINOKATA, H., OKANO, T., SABENA: Subassembly Boiling Evolution Numerical Analysis *[Power Reactor & Nucl. Fuel Dev. Corp., Oarai, Ibaraki, Japan]*

Vol. 120 No. 2-3 (1990) 369-383
SHIMIZU, T., NINOKATA, H., SHISHIDO, H., Distributed parameter analysis for the prediction of the fine structure of flow and temperature fields in wire-wrapped fuel pin bundle geometries *[Power Reactor & Nucl. Fuel Dev. Corp., Oarai, Ibaraki, Japan]*

Vol. 120 No. 2-3 (1990) 385-393
MORIYA, S., OHSHIMA, I., Hydraulic similarity in the temperature fluctuation phenomena of non-isothermal coaxial jets *[Cent. Res. Inst. Elect. Power Ind., Abiko, Chiba, Japan; Toshiba Co. Ltd., Kawasaki, Kanagawa, Japan]*

Vol. 120 No. 2-3 (1990) 395-402
TANAKA, N., MORIYA, S., USHIJIMA, S., KOGA, T., EGUCHI, Y., Prediction method for thermal stratification in a reactor vessel *[Cent. Res. Inst. Elect. Power Ind., Abiko, Chiba, Japan]*

Vol. 120 No. 2-3 (1990) 403-414
IEDA, Y., MAEKAWA, I., MURAMATSU, T., NAKANISHI, S., Experimental and analytical studies of the thermal stratification phenomenon in the outlet plenum of fast breeder reactors *[Power Reactor & Nucl. Fuel Dev. Corp., Oarai, Ibaraki, Japan]*

Vol. 120 No. 2-3 (1990) 415-423
OGAWA, M., HISHIDA, M., Thermohydraulic characteristics of coolant gas flow through a control rod channel in a very high temperature gas cooled reactor *[Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan]*

Vol. 120 No. 2-3 (1990) 425-434
KABURAKI, H., TAKIZUKA, T., Crossflow characteristics of HTGR fuel blocks *[Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan]*

Vol. 120 No. 2-3 (1990) 435-445
MIYAMOTO, Y., SUZUKI, K., HINO, R., TAKASE, K., INAGAKI, Y., IOKA, I., Thermal and hydraulic tests of test sections in the helium engineering demonstration loop *[Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan]*

Vol. 120 No. 2-3 (1990) 447-458
KAWANISHI, K., HIRAO, Y., TSUGE, A., An experimental study on drift flux parameters for two-phase flow in vertical round tubes *[Mitsubishi Heavy Ind. Co. Ltd., Takasago, Hyogo, Japan]*

Vol. 121 No. 1 (1990) 1-10
PARK, J.-W., DREW, D.A., LAHEY, R.T., CLAUSSE, A., Void wave dispersion in bubbly flows *[Comis. Nacl. Energia Atom, Bariloche, Argentina; Rensselaer Polytech. Inst., Troy, NY, USA]*

Vol. 121 No. 1 (1990) 11-23
SAITO, M., SATO, K., FURUTANI, A., ISOZAKI, M., IMAHORI, S., HATTORI, Y., Melting attack of solid plates by a high temperature liquid jet - Effect of crust formation *[Power Reactor & Nucl. Fuel Dev. Corp., Oarai, Ibaraki, Japan]*

Vol. 121 No. 1 (1990) 25-38
PONG, L.T., HECTR assessment of some HDR experiments *[Technadyne Engn. Consultants Inc., Albuquerque, NM, USA]*

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KUZELKA, V., Mathematical modelling of dynamic deformations in a cylindrical shell excited by turbulent flow *[Natl. Res. Inst. Machine Design, Prague, Czech Republic]*

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WANG, H., KONDO, S., A study on the stratified horizontal counter-current two-phase flow *[Univ. Tokyo, Tokyo, Japan]*

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YU, A., WALKER, S.P., FENNER, R.T., Pellet-clad bonding during PCMI *[Univ. London, Imperial Coll. Sci. Technol. & Med., London, England]*

Vol. 121 No. 1 (1990) 59-67
TZANOS, C.P., PEDERSEN, D.R., Analysis of RVACS tests for COMMIX validation *[Argonne Natl. Lab., Argonne, IL, USA]*

Vol. 121 No. 1 (1990) 69-81
LEE, S.Y., ISHII, M., Characteristics of two-phase natural circulation in freon-113 boiling loop *[Korea Adv. Inst. Sci. & Technol., Seoul, South Korea; Purdue Univ., West Lafayette, IN, USA]*

Vol. 121 No. 1 (1990) 83-92
SHIEH, S., UNAL, C., HSU, Y.Y., The effect of the hot-leg riser length on the carryover phenomena in a two-phase natural circulation loop *[Univ. Maryland, College Park, MD, USA]*

Vol. 121 No. 1 (1990) 93-101
THEOFANOUS, T.G., WANNIARACHCHI, A.S., RATNAM, U., Bubble-induced circulation and associated boundary heat transfer *[Univ. Calif. Santa Barbara, Santa Barbara, CA, USA]*

Vol. 121 No. 1 (1990) 103-111
ELAFIFY, M.M., CORRADINI, M.L., Condensation of vapor in the presence of a noncondensable gas at low pressures *[Univ. Wisconsin, Madison, WI, USA]*

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AMEUR-MOUSSA, R., BUYUKOZTURK, O., A bounding surface model for concrete *[MIT, Cambridge, MA, USA]*

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ZIERMANN, E., Review of 21 years of power operation at the AVR experimental nuclear power station in jülich *[KFA Jülich GmbH, Jülich, Germany]*

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GOTTAUT, H., KRÜGER, K., Results of experiments at the AVR reactor *[KFA Jülich GmbH, Jülich, Germany]*

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BÄUMER, R., KALINOWSKI, I., RÖHLER, E., SCHÖNING, J., WACHHOLZ, W., Construction and operating experience with the 300 MW THTR nuclear power plant *[Hochtemperatur Kernkraftwerk GmbH, Hamm, Germany; Hochtemperatur Reaktorbau GmbH, Mannheim, Germany]*

Vol. 121 No. 2 (1990) 167-171
KIRCH, N., GROSSER, E.D., HERZBERGER, K.-H., Status and aims of the research and development program for high-temperature reactors *[Hochtemperatur Kernkraftwerk GmbH, Frankfurt, Germany; Interatom GmbH, Bergisch Gladbach, Germany; KFA Jülich GmbH, Jülich, Germany]*

Vol. 121 No. 2 (1990) 173-182
HARTH, R., JANSING. W., TEUBNER, H., Experience gained from the EVA II and KVK operation *[Interatom GmbH, Bergisch Gladbach, Germany; KFA Jülich GmbH, Jülich, Germany]*

Vol. 121 No. 2 (1990) 183-192
NICKEL, H., SCHUBERT, F., BREITLING, H., BODMANN, E., Development and qualification of materials for structural components for the high-temperature gas-cooled reactor *[Hochtemperatur Reaktorbau GmbH, Mannheim, Germany; Interatom GmbH, Bergisch Gladbach, Germany; KFA Jülich GmbH, Jülich, Germany]*

Vol. 121 No. 2 (1990) 193-198
DUMM, K., THEYMANN, W., VON DER DECKEN, C.B., Design and qualification of components for high-temperature reactors *[Hochtemperatur Reaktorbau GmbH, Mannheim, Germany; Interatom GmbH, Bergisch Gladbach, Germany; KFA Jülich GmbH, Jülich, Germany]*

Vol. 121 No. 2 (1990) 199-210
NABIELEK, H., KÜHNLEIN, W., SCHENK, W., HEIT, W., CHRIST, A., RAGOSS, H., Development of advanced HTR fuel elements *[Hochtemperatur Reaktorbau GmbH, Mannheim, Germany; Interatom GmbH, Bergisch Gladbach, Germany; KFA Jülich GmbH, Jülich, Germany; Nukem GmbH, Hanau, Germany]*

Vol. 121 No. 2 (1990) 211-218
REHM, W., ALTES, J., BARTHELS, H., Thermodynamic investigations of passive decay heat removal from HTR cores and component behaviour *[KFA Jülich GmbH, Jülich, Germany]*

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KATSCHER, W., MOORMANN, R., VERFONDERN, K., VON DER DECKEN, C.B., INIOTAKIS, N., HILPERT, K., CHRIST, A., LOHNERT, G., WAWRZIK, U., Fission product behaviour and graphite corrosion under accident conditions in the HTR *[Arbeitsgemeinschaft Versuchsreaktor GmbH, Jülich, Germany; Hochtemperatur Reaktorbau GmbH, Mannheim, Germany; Interatom GmbH, Bergisch Gladbach, Germany; KFA Jülich GmbH, Jülich, Germany]*

Vol. 121 No. 2 (1990) 227-240
WOLF, L., SCHERER, W., GIESSER, W., FELTES, W., High-temperature reactor core physics and reactor dynamics *[Hochtemperatur Reaktorbau GmbH, Mannheim, Germany; Interatom GmbH, Bergisch Gladbach, Germany; KFA Jülich GmbH, Jülich, Germany]*

Vol. 121 No. 2 (1990) 241-248
KIRCH, N., BRINKMANN, H.U., BRÜCHER, P.H., Storage and final disposal of spent HTR fuel in the Federal Republic of Germany *[KFA Jülich GmbH, Jülich, Germany]*

Vol. 121 No. 2 (1990) 249-258
CANDELI, R., ARNDT, E., BARNERT, H., Status of the high-temperature reactor (HTR) - applications *[Hochtemperatur Reaktorbau GmbH, Frankfurt, Germany; KFA Jülich GmbH, Jülich, Germany]*

Vol. 121 No. 2 (1990) 259-275
LOHNERT, G.H., Technical design features and essential safety-related properties of the HTR Module *[Interatom GmbH, Bergisch Gladbach, Germany]*

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ARNDT, E., SCHÖNING, J., WACHHOLZ, W., Design status of the HTR 500 power plant *[Hochtemperatur Reaktorbau GmbH, Mannheim, Germany]*

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SCHMITT, H., The 20-MW gas-cooled heating reactor: Upgrading the GHR 10 *[Hochtemperatur Reaktorbau GmbH, Mannheim, Germany]*

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BRINKMANN, G., WILL, M., Concept licensing procedure for an HTR-Module nuclear power plant *[Interatom GmbH, Bergisch Gladbach, Germany; Siemens AG, KWU, Erlangen, Germany]*

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KROGER, W., MERTENS, J., WOLTERS, J., Basic risk analyses for high-temperature reactors *[KFA Jülich GmbH, Jülich, Germany; Paul Scherrer Inst., Villigen, Switzerland]*

Vol. 121 No. 2 (1990) 311-315
BAUST, E., WEISBRODT, I., Introducing the high-temperature reactor into the market - Status and strategy *[Hochtemperatur Reaktorbau GmbH, Frankfurt, Germany]*

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STEINWARZ, W., XU, Y.H., Status of design of the HTR Test Module China *[Inst. Nucl. Energy Technol., Beijing, P.R. China; Interatom GmbH, Bergisch Gladbach, Germany]*

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HODGE, S.A., OTT, L.J., BWRSAR calculations of reactor vessel debris pours for Peach Bottom short-term station blackout *[Oak Ridge Natl. Lab., Oak Ridge, TN, USA]*

Vol. 121 No. 3 (1990) 341-347
PARKER, G.W., OTT, L.J., HODGE, S.A., Small scale BWR core debris eutectics formation and melting experiment *[Oak Ridge Natl. Lab., Oak Ridge, TN, USA]*

Vol. 121 No. 3 (1990) 349-366
ISHII, M., DENTEN, J.P., Two-phase flow characteristic of inverted bubbly, slug and annular flow in post-critical heat flux region *[Argonne Natl. Lab., Argonne, IL, USA; Purdue Univ., West Lafayette, IN, USA]*

Vol. 121 No. 3 (1990) 367-378
CHOU, Y.C., GRIFFITH, P., Admitting cold water into steam filled pipes without water-hammer due to steam bubble collapse *[Atom Energy Council, Taipei, Taiwan; MIT, Cambridge, MA, USA]*

Vol. 121 No. 3 (1990) 379-393
HYMAN, C.R., CONTAIN calculations of debris conditions adjacent to the BWR Mark I drywell shell during the later phases of a severe accident *[Oak Ridge Natl. Lab., Oak Ridge, TN, USA]*

Vol. 121 No. 3 (1990) 395-408
MONTGOMERY, R.O., RASHID, Y.R., GEORGE, J.A., PEDDICORD, K.L., LIN, C.L., Validation of FREY for the safety analysis of LWR fuel using transient fuel rod experiments *[Anatech Res. Corp., La Jolla, CA, USA; Elect. Power Res. Inst., Palo Alto, CA, USA; Texas A&M Univ., College Station, TX, USA]*

Vol. 121 No. 3 (1990) 409-419
MARSILI, P., PASCULLI, A., CAMICIOLA, P., ATWS scoping calculations for a BWR plant performed using RELAP5/MOD2 and CONTAIN codes *[Ente Nazl. Energia Atom, Rome, Italy]*

Vol. 121 No. 3 (1990) 421-429
DALLMAN, R.J., GALYEAN, W.J., WAGNER, K.C., Containment venting as an accident management strategy for BWRs with Mark I containments *[EG&G Idaho Inc., Idaho Natl. Engn. Lab., Idaho Falls, ID, USA; Sci. Applicat. Int. Corp., Albuquerque, NM, USA]*

Vol. 121 No. 3 (1990) 431-440
KUKITA, Y., KATAYAMA, J., NAKAMURA, H., TASAKA, K., Loop seal clearing and refilling during a PWR small-break LOCA *[Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan]*

Vol. 121 No. 3 (1990) 441-446
SPECTER, H., BIENIARZ, P., Is Mark-I shell failure really important? Part 1 *[New York Power Authority, White Plains, NY, USA; Risk Management Assoc., Albuquerque, NM, USA]*

Vol. 121 No. 3 (1990) 447-458
SPECTER, H., BIENIARZ, P., Is Mark I shell failure really important? Part 2 *[New York Power Authority, White Plains, NY, USA; Risk Management Assoc., Albuquerque, NM, USA]*

Vol. 121 No. 3 (1990) 459-472
SIEBE, D.A., STEINER, J.L., BOYACK, B.E., TRAC-PF1/MOD1 calculations and data comparisons for MIST small-break LOCA, feed-and-bleed and steam-generator tube-rupture experiments *[Univ. Calif. Los Alamos Sci. Lab., Los Alamos, NM, USA]*

Vol. 122 No. 1 (1990) 1-16
SERIZAWA, A., KATAOKA, I., Turbulence suppression in bubbly two-phase flow *[Kyoto Univ., Kyoto, Japan]*

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LAHEY, R.T. (JR.), The analysis of phase separation and phase distribution phenomena using two-fluid models *[Rensselaer Polytech. Inst., Troy, NY, USA]*

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LE COQ, G., METAICH, M., SLASSI-SENNOU, M., A simple model for the study of dynamic instabilities in steam generators *[Elect. France, Div. R&D, Clamart, France]*

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HIRANO, M., WATANABE, T., Numerical study on shock phenomena and void wave propagation in horizontal stratified flow *[Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan]*

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SUGAWARA, S., Droplet deposition and entrainment modeling based on the three-fluid model *[Power Reactor & Nucl. Fuel Dev. Corp., Oarai, Ibaraki, Japan]*

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USHIJIMA, S., TANAKA, N., MORIYA, S., Turbulence measurements and calculations of non-isothermal coaxial jets *[Cent. Res. Inst. Elect. Power Ind., Abiko, Chiba, Japan]*

Vol. 122 No. 1 (1990) 95-104
CHAN, A.M.C., BZOVEY, D., Measurement of mass flux in high temperature high pressure steam-water two-phase flow using a combination of Pitot tubes and a gamma densitometer *[Ontario Hydro, Toronto, Ontario, Canada]*

Vol. 122 No. 1 (1990) 105-118
JAYANTI, S., BERTHOUD, G., High-quality dryout in helical coils *[CEA, CEN, DRN, DTP, STR, Grenoble, France]*

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LEE, S.Y., ISHII, M., Thermally induced flow oscillation in vertical two-phase natural circulation loop *[Korea Adv. Inst. Sci. & Technol., Seoul, South Korea; Purdue Univ., West Lafayette, IN, USA]*

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LIAO, L.-Y., An analytical method for estimating voiding rate in a flow stagnated core during a constant pressure heatup process *[Inst. Nucl. Energy Res., Lungtan, Taiwan]*

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CHANG, J.S., MORALA, E.C., Determination of two-phase interfacial areas by an ultrasonic technique *[McMaster Univ., Hamilton, Ontario, Canada]*

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LIM, I.C., SIM, K.-S., HEO, Y.H., RHEE, B.W., HWANG, W., OH, S.K., SUK, H.C., Development of a 2D conduction code for a finned fuel element analysis *[Korea Atom Energy Res. Inst., Taejon, South Korea]*

Vol. 122 No. 1 (1990) 175-194
HSU, Y.Y., WANG, Z.Y., UNAL, C., DI MARZO, M., ALMENAS, K., Scaling-modeling for small break LOCA test facilities *[Univ. Maryland, College Park, MD, USA]*

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LEE, G.J., CHANG, S.H., Development of the finite element method of body fit nodalization for mixed convection analysis in rod bundles *[Chosun Univ., Kwang Ju, South Korea; Korea Adv. Inst. Sci. & Technol., Seoul, South Korea]*

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D'AURIA, F., GALASSI, G.M., Flowrate and density oscillations during two-phase natural circulation in PWR typical conditions *[Univ. Pisa, Pisa, Italy]*

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WEISS, P., WATZINGER, H., HERTLEIN, R., UPTF experiment: a synopsis of full scale test results *[Siemens AG, KWU, Erlangen, Germany]*

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MITSUTAKE, T., TERASAKA, H., YOSHIMURA, K., OISHI, M., INOUE, A., AKIYAMA, M., Subchannel analysis of a critical power test, using simulated BWR 8×8 fuel assembly *[Nippon Atom Ind. Grp. Co. Ltd., Kawasaki, Kanagawa, Japan; Nucl. Power Engn. Test Ctr., Tokyo, Japan; Tokyo Inst. Technol., Tokyo, Japan; Toshiba Co. Ltd., Kawasaki, Kanagawa, Japan; Toshiba Co. Ltd., Yokohama, Kanagawa, Japan; Univ. Tokyo, Tokyo, Japan]*

Vol. 122 No. 1 (1990) 255-262
KUKITA, Y., TASAKA, K., ASAKA, H., YONOMOTO, T., KUMAMARU, H., The effects of break location on PWR small break LOCA: Experimental study at the ROSA-IV LSTF *[Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan; Nagoya Univ., Nagoya, Aichi, Japan]*

Vol. 122 No. 1 (1990) 263-271
ARDRON, K.H., BRYCE, W.M., Assessment of horizontal stratification entrainment model in RELAP5/MOD2 by comparison with separate effects experiments *[Nucl. Elect., Barnwood, Glos, England; UKAEA Technol., Winfrith Technol. Ctr., Dorchester, Dorset, England]*

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CHAN, P.C., NAKAYAMA, P.I., A two-dimensional analysis of in-vessel buoyancy driven flows during a degraded core scenario *[Jason Assoc., Del Mar, CA, USA; Jaycor, San Diego, CA, USA]*

Vol. 122 No. 1 (1990) 287-299
CORRADINI, M.L., Current aspects of LWR containment loads due to severe reactor accidents *[Univ. Wisconsin, Madison, WI, USA]*

Vol. 122 No. 1 (1990) 301-311
NA, M.G., NO, H.C., Design of model reference adaptive control system for steam generators *[Korea Adv. Inst. Sci. & Technol., Seoul, South Korea]*

Vol. 122 No. 1 (1990) 313-327
LEE, J.Y., NO, H.C., Dynamic scaling method for testing the performance of the water level controller of nuclear steam generators *[Korea Adv. Inst. Sci. & Technol., Seoul, South Korea]*

Vol. 122 No. 1 (1990) 329-338
GRUEN, A., PWR optimization for operational flexibility and fuel utilization *[Siemens AG, KWU, Erlangen, Germany]*

Vol. 122 No. 1 (1990) 339-348
LEE, J.H., CHANG, S.H., YOON, W.H., HONG, S.Y., Optimal test interval modeling of the nuclear safety system using the inherent unavailability and human error *[Korea Adv. Energy Res. Inst., Seoul, South Korea; Korea Adv. Inst. Sci. & Technol., Seoul, South Korea; Korea Elect. Power Co., Seoul, South Korea]*

Vol. 122 No. 1 (1990) 349-355
DIX, G.E., SHIRALKAR, B.S., BWR transient analysis payoffs from LOCA research *[GE, San Jose, CA, USA]*

Vol. 122 No. 1 (1990) 357-364
ISHIKAWA, M., KAWASAKI, M., YOKOTA, M., JPDR decommissioning program - Plan and experience *[Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan]*

Vol. 122 No. 1 (1990) 365-376
SAFWAT, H.H., ARASTU, A.H., HUSAINI, S.M., Systematic methodology for diagnosis of water hammer in LWR power plants *[Bechtel Power Corp., San Francisco, CA, USA]*

Vol. 122 No. 1 (1990) 377-386
LEE, J.Y., NO, H.C., Local chemical and thermal-hydraulic analysis of U-tube steam generators *[Korea Adv. Inst. Sci. & Technol., Seoul, South Korea]*

Vol. 122 No. 1 (1990) 387-399
BABALA, D., BREDOLT, U., KEMPPAINEN, J., A study of the dynamics of SECURE reactors: Comparison of experiments and computations *[ASEA Brown Boveri Atom AB, Västerås, Sweden]*

Vol. 122 No. 1 (1990) 401-412
INGHAM, P.J., MCGEE, G.R., KRISHNAN, V.S., LOCA assessment experiments in a full-elevation, CANDU-typical test facility *[Atom Energy Canada Ltd. Res., Whiteshell Labs, Pinawa, Manitoba, Canada]*

Vol. 122 No. 1 (1990) 413-424
CARVER, M.B., TAHIR, A., KITELEY, J.C., BANAS, A.O., ROWE, D.S., MIDVIDY, W.I., Simulation of the distribution of flow and phases in vertical and horizontal bundles using the ASSERT-4 subchannel code *[Atom Energy Canada Ltd. Res., Chalk River Nucl. Labs, Chalk River, Ontario, Canada; Ontario Hydro, Toronto, Ontario, Canada; Rowe Assoc., Bellevue, WA, USA]*

Vol. 122 No. 1 (1990) 425-434
DIMMICK, G.R., BINDNER, P.E., CHATOORGOON, V., SCHENK, J.R., SOLLYCHIN, R., Thermalhydraulics R & D for SLOWPOKE heating reactors *[Atom Energy Canada Ltd. Res., Chalk River Nucl. Labs, Chalk River, Ontario, Canada]*

Vol. 122 No. 1 (1990) 435-442
SUGIYAMA, K., MA, Y., ISHIGURO, R., Laminar combined convection heat transfer of liquid sodium flowing through a single horizontal row of cooling tubes in the direction of gravity *[Hokkaido Univ., Sapporo, Hokkaido, Japan]*

Vol. 122 No. 1 (1990) 443-452
KROEGER, P.G., Safety evaluations of accident scenarios in high temperature gas-cooled reactors *[Brookhaven Natl. Lab., Upton, NY, USA]*

Vol. 123 No. 1 (1990) 1-16
FAN, F.-G., AHMADI, G., TADJBAKHSH, I.G., Multi-story base-isolated buildings under a harmonic ground motion - Part I: A comparison of performances of various systems *[Clarkson Univ., Potsdam, NY, USA; Rensselaer Polytech. Inst., Troy, NY, USA]*

Vol. 123 No. 1 (1990) 17-26
FAN, F.G., AHMADI, G., TADJBAKHSH, I.G., Multi-story base-isolated buildings under a harmonic ground motion - Part II: Sensitivity analysis *[Clarkson Univ., Potsdam, NY, USA; Rensselaer Polytech. Inst., Troy, NY, USA]*

Vol. 123 No. 1 (1990) 27-44
SUES, R.H., AMICO, P.J., CAMPBELL, R.D., Significance of earthquake risk in nuclear power plant probabilistic risk assessments *[Appl. Res. Assoc. Inc., Raleigh, NC, USA; EQE Inc., Newport Beach, CA, USA; SAIC, Germantown, MD, USA]*

Vol. 123 No. 1 (1990) 45-55
LAM, P.C., SANDHU, T.S., HUFF, D.L., SANDIFER, J.B., An investigation of peripheral gap and open lane effects on flow-induced vibrations of tube bundles *[Babcock & Wilcox Co., Alliance, OH, USA; NASA, Lewis Res. Ctr., Cleveland, OH, USA; Univ. Akron, Akron, OH, USA]*

Vol. 123 No. 1 (1990) 57-66
WEINGARDT, J.J., GAUNTT, R.O., Analytic technique for measuring hydrogen production during in-pile severe nuclear fuel damage experiments *[Sandia Natl. Labs, Albuquerque, NM, USA; Sci. Applicat. Int. Corp., Albuquerque, NM, USA]*

Vol. 123 No. 1 (1990) 67-75
BALLYK, J.D., SHOUKRI, M., On the development of a model for predicting phase separation phenomena in dividing two-phase flow *[McMaster Univ., Hamilton, Ontario, Canada]*

Vol. 123 No. 1 (1990) 77-86
INAGAKI, Y., KUNUGI, T., MIYAMOTO, Y., Thermal mixing test of coolant in the core bottom structure of a high temperature engineering test reactor *[Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan]*

Vol. 123 No. 1 (1990) 87-90
SELVARAJ, P., SEETHARAMU, K.N., VAIDYANATHAN, G., Large leak sodium-water reaction analysis of an LMFBR steam generator using a variable temperature spherical bubble model *[Indian Inst. Technol., Dept. Mech. Engn., Madras, Tamil Nadu, India; Indira Gandhi Ctr. Atom Res., Kalpakkam, India]*

Vol. 123 No. 2-3 (1990) 99-109
SAVY, J., BERNREUTER, D., MENSING, R., Probabilistic assessment of the seismic hazard for Eastern United States nuclear power plants *[Univ. Calif. Lawrence Livermore Natl. Lab., Livermore, CA, USA]*

Vol. 123 No. 2-3 (1990) 111-122
O'HARA, T., JACOBSON, J., Seismic hazard analyses - a utility perspective *[Yankee Atom Elect. Co., Boston, MA, USA]*

Vol. 123 No. 2-3 (1990) 123-128
REITER, L., Probabilistic seismic hazard analysis - lessons learned: a regulator's perspective *[US Nucl. Regulatory Commiss., Washington, DC, USA]*

Vol. 123 No. 2-3 (1990) 129-141
SEWELL, R.T., MCGUIRE, R.K., STEPP, J.C., TORO, G.R., CORNELL, C.A., Approaches that use seismic hazard results to address topics of nuclear power plant seismic safety, with application to the Charleston earthquake issue *[Elect. Power Res. Inst., Palo Alto, CA, USA; Risk Engn. Inc., Golden, CO, USA; Stanford Univ., Stanford, CA, USA]*

Vol. 123 No. 2-3 (1990) 143-153
McCANN, M.W. (JR.), REED, J.W., Lower bound earthquake magnitude for probabilistic seismic hazard evaluation *[JR Benjamin & Assoc. Inc., Mount View, CA, USA]*

Vol. 123 No. 2-3 (1990) 155-166
RAVINDRA, M.K., BOHN, M.P., MOORE, D.L., MURRAY, R.C., Recent PRA applications *[EQE Engn. Inc., Costa Mesa, CA, USA; NUS Corp., Kent, WA, USA; Sandia Natl. Labs, Albuquerque, NM, USA; Univ. Calif. Lawrence Livermore Natl. Lab., Livermore, CA, USA]*

Vol. 123 No. 2-3 (1990) 167-188
KENNEDY, R.P., SARKAR, B.E., CLUFF, L.S., On some aspects of seismic fragility evaluation for Diablo Canyon seismic PRA *[Bechtel Power Corp., San Francisco, CA, USA; Pacific Gas & Elect. Co., San Francisco, CA, USA; RPK Struct. Mech. Consulting Inc., Yorba Linda, CA, USA]*

Vol. 123 No. 2-3 (1990) 189-196
ELLINGWOOD, B., Validation studies of seismic PRAs *[Johns Hopkins Univ., Baltimore, MD, USA]*

Vol. 123 No. 2-3 (1990) 197-204
BUDNITZ, R.J., PRASSINOS, P.G., RAVINDRA, M.K., Recent extensions to seismic margin review methodology *[EQE Engn. Inc., Costa Mesa, CA, USA; Future Resources Assoc. Inc., Berkeley, CA, USA; Univ. Calif. Lawrence Livermore Natl. Lab., Livermore, CA, USA]*

Vol. 123 No. 2-3 (1990) 205-216
KENNEDY, R.P., KASSAWARA, R.P., Seismic evaluation of large flat-bottomed tanks *[Elect. Power Res. Inst., Palo Alto, CA, USA; RPK Struct. Mech. Consulting Inc., Yorba Linda, CA, USA]*

Vol. 123 No. 2-3 (1990) 217-223
SCHMIDT, W.R., KASSAWARA, R.P., SMITH, N.P., YANEV, P., The SQUG program for resolution of USI A-46 – Status and implementation plans *[Commonwealth Edison Co., Chicago, IL, USA; EQE Engn. Inc., San Francisco, CA, USA; Elect. Power Res. Inst., Palo Alto, CA, USA; MPR Assoc. Inc., Washington, DC, USA]*

Vol. 123 No. 2-3 (1990) 225-231
STARCK, R.G. (II), THOMAS, G.G., Overview of SQUG Generic Implementation Procedure (GIP) *[MPR Assoc. Inc., Washington, DC, USA; Stevenson & Assoc., Cleveland, OH, USA]*

Vol. 123 No. 2-3 (1990) 233-240
AGRAWAL, P.K., SMITH, N.P., WALSER, A., BERTHEAU, S.R., Zion SQUG pilot walkdown and resolution of outliers *[Commonwealth Edison Co., Chicago, IL, USA; Sargent & Lundy Engn., Chicago, IL, USA]*

Vol. 123 No. 2-3 (1990) 241-245
SMITH, P.D., EDER, S.J., CONOSCENTE, J.-P., SQUG cable tray and conduit evaluation procedure *[EQE Engn. Inc., San Francisco, CA, USA; Readiness Operat., Oakland, CA, USA]*

Vol. 123 No. 2-3 (1990) 247-255
MERZ, K.L., IBANEZ, P., Guidelines for estimation of cabinet dynamic amplification *[ANCO Engn. Inc., Culver City, CA, USA]*

Vol. 123 No. 2-3 (1990) 257-264
JHAVERI, D.P., CZARNECKI, R.M., KASSAWARA, R.P., SINGH, A., Seismic demand evaluation based on actual earthquake records *[Elect. Power Res. Inst., Palo Alto, CA, USA; JA Blume & Assoc. Engn., San Francisco, CA, USA]*

Vol. 123 No. 2-3 (1990) 265-272
MANRIQUE, M., ASFURA, A., MUKHIM, G., Methodologies for rapid evaluation of seismic demand levels in nuclear power plant structures *[ABB Impell. Corp., San Ramon, CA, USA]*

Vol. 123 No. 2-3 (1990) 273-278
JOHNSON, H.W., HARDY, G.S., HORSTMAN, N.G., BAUGHMAN, P.D., Use of seismic experience data for replacement and new equipment *[EQE Engn., Stratham, NH, USA; EQE Engn. Inc., Costa Mesa, CA, USA; EQE Engn. Inc., San Francisco, CA, USA; RL Cloud & Assoc. Inc., Berkeley, CA, USA]*

Vol. 123 No. 2-3 (1990) 279-289
MERZ, K.L., WADE, M.P., BETLACK, J., Testing to determine relay seismic ruggedness *[ANCO Engn. Inc., Culver City, CA, USA; MPR Assoc. Inc., Washington, DC, USA]*

Vol. 123 No. 2-3 (1990) 291-297
HINTERGRÄBER, M., Simplified seismic analysis methods in the Federal Republic of Germany (FRG) – Application to low seismicity sites *[Siemens AG, KWU, Erlangen, Germany]*

Vol. 123 No. 2-3 (1990) 299-304
GERAETS, L.H., Simplified seismic analysis methods in Belgium *[Tractebel Energy Engn., Brussels, Belgium]*

Vol. 123 No. 2-3 (1990) 305-312
BETBEDER-MATIBET, J., LABBÉ, P., Simplified seismic analysis methods in France *[Elect. France, Paris, France]*

Vol. 123 No. 2-3 (1990) 313-320
KUNAR, R.R., SMITH, C.R., Methods and requirements for seismic design in the United Kingdom *[BEQE, Warrington, Cheshire, England; Natl. Nucl. Corp. Ltd., Knutsford, Cheshire, England]*

Vol. 123 No. 2-3 (1990) 321-325
WATABE, M., Simplified seismic analysis methods in Japan *[Tokyo Metropolitan Univ., Fac. Engn., Tokyo, Japan]*

Vol. 123 No. 2-3 (1990) 327-334
DUFF, C.G., Simplified seismic analysis methods used by AECL for the seismic qualification of CANDU nuclear power plants *[Atom Energy Canada Ltd. Res., Sheridan Pk. Res. Community, Mississauga, Ontario, Canada]*

Vol. 123 No. 2-3 (1990) 335-342
CHU, S.-L., SKACZYLO, A.T., Configuration management and load monitoring procedures for nuclear plant structures *[Sargent & Lundy Engn., Chicago, IL, USA]*

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SMITH, P.R., COOK, R.A., Design basis reconstitution and configuration management of nuclear power plants *[Construct. Syst. Assoc. Inc., Marietta, GA, USA; PR Smith & Assoc. Inc., Atlanta, GA, USA]*

Vol. 123 No. 2-3 (1990) 361-371
BITNER, J.L., PVRC damping and application benefits *[JLB Engn. Inc., Bethel Park, PA, USA]*

Vol. 123 No. 2-3 (1990) 373-385
TAGART, S.W. (JR.), TANG, Y.K., GUZY, D.J., RANGANATH, S., Piping dynamic reliability and code rule change recommendations *[Elect. Power Res. Inst., Palo Alto, CA, USA; GE, San Jose, CA, USA; US Nucl. Regulatory Commiss., Washington, DC, USA]*

Vol. 123 No. 2-3 (1990) 387-396
REED, J.W., KASSAWARA, R.P., A criterion for determining exceedance of the operating basis earthquake *[Elect. Power Res.*

Inst., Palo Alto, CA, USA; JR Benjamin & Assoc. Inc., Mount View, CA, USA]

Vol. 123 No. 2-3 (1990) 397-412
TANG, H.T., TANG, Y.K., STEPP, J.C., Lotung large-scale seismic experiment and soil-structure interaction method validation *[Elect. Power Res. Inst., Palo Alto, CA, USA]*

Vol. 123 No. 2-3 (1990) 413-420
HUSTON, R.W., STEPP, J.C., WHITCRAFT, J.S., Industry perspective on resolution of seismic issues *[Elect. Power Res. Inst., Palo Alto, CA, USA; US Nucl. Management & Resources Council, Washington, DC, USA]*

Vol. 123 No. 2-3 (1990) 421-423
SHAO, L.C., ROTHMAN, R.L., Regulatory perspective of seismic issues *[US Nucl. Regulatory Commiss., Washington, DC, USA]*

Vol. 123 No. 2-3 (1990) 425-430
BAGCHI, G., JENG, D., ASHAR, H., Proposed modifications of NRCs standard review plan for seismic analysis *[US Nucl. Regulatory Commiss., Washington, DC, USA]*

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AMANO, M., The needs of the nuclear pressure boundary industry in the 1990s *[Ishikawajima Harima Heavy Ind. Co. Ltd., Tokyo, Japan]*

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SHEWMON, P., Current and emerging pressure boundary issues – a United States Regulatory perspective *[Ohio State Univ., Columbus, OH, USA]*

Vol. 124 No. 1-2 (1990) 33-42
JONES, R.L., NELSON, J.L., Hydrogen water chemistry for BWRs: a status report on the EPRI development program *[Elect. Power Res. Inst., Palo Alto, CA, USA]*

Vol. 124 No. 1-2 (1990) 43-51
MAGER, T.R., Thermal annealing of an embrittled reactor vessel: feasibility and methodology *[Westinghouse Elect. Corp., Pittsburgh, PA, USA]*

Vol. 124 No. 1-2 (1990) 53-70
RANGANATH, S., SANDUSKY, D.W., CHAPMAN, T.L., GORDON, G.M., KISS, E., Proactive approaches to assure the structural integrity of Boiling Water Reactor components *[GE, San Jose, CA, USA]*

Vol. 124 No. 1-2 (1990) 71-77
LEINE, L., RYLANDER, L., SHIELDS, E., UNNEBERG, L., Cracking in BWR internals – the Swedish perspective on prevention, mitigation and repair *[ABB TRC, Taby, Sweden; ASEA Brown Boveri Atom AB, Västerås, Sweden; Innovat. Technol. Inc., Pittsburgh, PA, USA; Westinghouse Elect. Corp., Pittsburgh, PA, USA]*

Vol. 124 No. 1-2 (1990) 79-89
SMITH, R.E., HANFORD, R., CHENG, S.C., Pressure vessel nozzle repair *[Carolina Power & Light Co., Raleigh, NC, USA; Environm. Protect. Res. Inst., Charlotte, NC, USA; Taiwan Power Co., Taipei, Taiwan]*

Vol. 124 No. 1-2 (1990) 91-100
POROWSKI, J.S., O'DONNELL, W.J., BADLANI, M.L., HAMPTON, E.J., Use of the mechanical stress improvement process to mitigate stress corrosion cracking in BWR piping systems *[SMC Odonnell Inc., Pittsburgh, PA, USA]*

Vol. 124 No. 1-2 (1990) 109-119
CHEVERTON, R.D., BRYSON, J.W., ALEXANDER, D.J., SLOT, T., Thermal-shock experiments with flawed clad cylinders *[Oak Ridge Natl. Lab., Oak Ridge, TN, USA]*

Vol. 124 No. 1-2 (1990) 121-128
ISKANDER, S.K., ROBINSON, G.C., OLAND, C.B., Flaw behavior in mechanically loaded clad plates *[Oak Ridge Natl. Lab., Oak Ridge, TN, USA]*

Vol. 124 No. 1-2 (1990) 129-141
HAGGAG, F.M., CORWIN, W.R., NANSTAD, R.K., Effects of irradiation on the fracture properties of stainless steel weld overlay cladding *[Oak Ridge Natl. Lab., Oak Ridge, TN, USA]*

Vol. 124 No. 1-2 (1990) 143-152
SCHULZ, H., GRUNER, P., Questions on safety margins of components at loads beyond design – Failure modes of the primary system of PWRs *[Ges. Reaktorsicherheit GmbH, Cologne, Germany]*

Vol. 124 No. 1-2 (1990) 153-156
GRIESBACH, T.J., SERVER, W.L., The EPRI Embrittlement Management Program *[Elect. Power Res. Inst., Palo Alto, CA, USA; Tenera, Berkeley, CA, USA]*

Vol. 124 No. 1-2 (1990) 157-170
KUSSMAUL, K., ROOS, E., DIEM, H., KATZENMEIER, G., KLEIN, M., NEUBRECH, G.E., WOLF, L., Cyclic and transient thermal loading of the HDR reactor pressure vessel with respect to crack initiation and crack propagation *[Battelle Inst. eV, Frankfurt, Germany; Univ. Stuttgart, Staatliche Materialprüfungsanstalt, Stuttgart, Germany]*

Vol. 124 No. 1-2 (1990) 171-192
KORDISCH, H., TALJA, H., NEUBRECH, G.E., Analysis of initiation and growth of a circumferential crack in the HDR-RPV-cylinder under pressurized thermal shock *[Fraunhofer Inst. Werkstoffmech., Freiburg, Germany; KFZ Karlsruhe GmbH, Karlsruhe, Germany; Tech. Res. Ctr. Finland, Helsinki, Finland]*

Vol. 124 No. 1-2 (1990) 193-216
RINTAMAA, R., TALJA, H., SAARENHEIMO, A., KEINÄNEN, H., WALLIN, K., IKONEN, K., Validation of experimental and computational fracture assessment methods for flawed pressure components *[Tech. Res. Ctr. Finland, Espoo, Finland]*

Vol. 124 No. 3 (1990) 229-245
BESTION, D., The physical closure laws in the CATHARE code *[CEA, CEN, DRN, DTP, STR, Grenoble, France]*

Vol. 124 No. 3 (1990) 247-256
MACIASZEK, T., MICAELLI, J.C., CATHARE phase separation modeling for small breaks in horizontal pipes with stratified flow *[CEA, CEN, DRN, DTP, STR, Grenoble, France]*

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BARRE, F., BERNARD, M., The CATHARE code strategy and assessment *[CEA, CEN, DRN, DTP, STR, Grenoble, France]*

Vol. 124 No. 3 (1990) 285-297
BAZIN, P., CLEMENT, P., DERUAZ, R., DUMONT, D., GULLY, PH., NOEL, B., Investigation of PWR accident situations at BETHSY facility *[CEA, CEN, DRN, DTP, STR, Grenoble, France]*

Vol. 124 No. 3 (1990) 299-313
RAYMOND, P., SPINDLER, B., LENAIN, R., Pressurized water reactor thermal-hydraulic core analysis with the FLICA computer code *[CEA, CENS, IRDI, Gif sur Yvette, France]*

Vol. 124 No. 3 (1990) 315-338
REMOND, A., AXISA, F., BOIVIN, J.-Y., BOUCHTER, J.-C., PWR steam generator R & D in France: thermal-hydraulic and vibratory aspects *[CEA, CEN, Cadarache, France; CEA, Dept. Etud. Mecan. & Therm., Saclay, France; Elect. France, Div. R&D, Chatou, France; Framatome France, Paris, France]*

Vol. 124 No. 3 (1990) 339-361
VIOLLET, P.L., GRAND, D., CHABARD, J.P., MAGNAUD, J.P., Refined numerical modelling in thermal-hydraulic analysis *[CEA, CEN, DRN, DTP, STR, Grenoble, France; CEA, CENS, IRDI, Gif sur Yvette, France; Elect. France, Div. R&D, Chatou, France]*

Vol. 124 No. 3 (1990) 363-378
RÉOCREUX, M., DE MARTINVILLE, E.S., A study of fuel behavior in PWR design basis accident: an analysis of results from the PHEBUS and EDGAR experiments *[CEA, CEN, Cadarache, France]*

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CARBONNIER, J.L., FORESTIER, F., GRAND, D., LACROIX, C., PETURAUD, P., Thermo-hydraulics for LMFBR's components *[CEA, CEN, Cadarache, France; CEA, CEN, DRN, DTP, STR, Grenoble, France; Elect. France, Div. R&D, Chatou, France; Novatome, Lyon, France]*

Vol. 124 No. 3 (1990) 391-401
ZIEGLER, B., COPPOLANI, P., GARCIA, J.L., Dynamic behavior of check valves and safety valves with fluid interaction *[CEA, CENS, IRDI, Gif sur Yvette, France; Elect. France, Paris, France; Framatome France, Paris, France]*

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SEILER, J.M., COGNET, G., LEBORGNE, E., LAHAYE, J.P., MOREAU, J., OLIVE, J., PAGES, J.R., PAPIN, J., RAMEAU, B., French LMFBR core thermo-hydraulic studies for nominal and accident conditions *[Belgonucl SA, Brussels, Belgium; CEA, CEN, DRN, DTP, STR, Grenoble, France; Elect. France, Paris, France]*

Vol. 124 No. 3 (1990) 417-430
AZARIAN, M., ASTEGIANO, M., TENCHINE, M., LACROIX, M., VIDARD, M., Sodium thermal-hydraulics in the pool LMFBR primary vessel *[CEA, CENS, IRDI, Gif sur Yvette, France; Elect. France, Paris, France; Framatome France, Paris, France]*

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EBERLE, F., GÖLLER, B., KRIEG, R., RAFF, S., WOLF, E., Special aspects of the dynamic behavior of spherical containment shells *[KFZ Karlsruhe GmbH, Karlsruhe, Germany]*

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JULIEN, J.T., PETERS, S.W., CLAUSS, D.B., Leak rate test of personnel airlock for LWR containment subject to pressures and temperatures beyond design *[Chicago Bridge & Iron Tech. Serv. Co., Plainfield, IL, USA; Sandia Natl. Labs, Albuquerque, NM, USA]*

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DAMERON, R.A., DUNHAM, R.S., RASHID, Y.R., TANG, H.T., Conclusions of the EPRI Concrete Containment Research Program *[Anatech Res. Corp., La Jolla, CA, USA; Elect. Power Res. Inst., Palo Alto, CA, USA]*

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BARBÉ, B., COSTAZ, J.L., Design and behaviour of French containments *[CEA, CEN, IPSN, Fontenay Aux Roses, France; Elect. France, Paris, France]*

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WHITE, R.N., Scaling of structural response of containments *[Cornell Univ., Ithaca, NY, USA]*

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TWIDALE, D., CROWDER, R., Sizewell 'B' – a one tenth scale containment model test for the UK PWR programme *[Nucl. Design Assoc., Warrington, Cheshire, England]*

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GEORGE, C.M., FRANCE, D.M., Post-CHF two-phase flow with low wall-superheat *[Univ. Illinois, Chicago, IL, USA]*

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SHEN, Y.F., CAO, Z.D., LU, Q.G., An investigation of crossflow mixing effect caused by grid spacer with mixing blades in a rod bundle *[Xian Jian Tong Univ., Xian, P.R. China]*

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GUIDO, G., CONVERTI, J., CLAUSSE, A., Density-wave oscillations in parallel channels – an analytical approach *[Comis. Nacl. Energia Atom, Bariloche, Argentina]*

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DI MARZO, M., ALMENAS, K., HSU, Y.Y., On the scaling of pressure for integral test facilities *[Univ. Maryland, College Park, MD, USA]*

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SMITH, J.F., HSIAO, M.-Y., LIN, T.F., WILLIS, M.G., Magnetohydrodynamically enhanced heat transfer in a liquid metal system *[Penn. State Univ., University Park, PA, USA]*

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UNAL, C., TUZLA, K., COKMEZ-TUZLA, A.F., CHEN, J.C., Vapor generation rate model for dispersed drop flow *[Lehigh Univ., Bethlehem, PA, USA]*

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HEAMES, T.J., SMITH, R.C., Integrated MELPROG/TRAC analyses of a PWR station blackout *[Sandia Natl. Labs, Albuquerque, NM, USA; Sci. Applicat. Int. Corp., Albuquerque, NM, USA]*

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TUZLA, K., UNAL, C., CHEN, J.C., An experimental study of bottom-rewetting in a rod bundle geometry *[Lehigh Univ., Bethlehem, PA, USA]*

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LEMONNIER, H., HERVIEU, E., Theoretical modelling and experimental investigation of single-phase and two-phase flow division at a tee-junction *[CEA, CEN, DRN, DTP, STR, Grenoble, France]*

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SCHWER, L.E., DAY, J., Computational techniques for penetration of concrete and steel targets by oblique impact of deformable projectiles *[Advent. Engn. Serv., San Ramon, CA, USA; Aptek Inc., San Jose, CA, USA]*

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YOUNGDAHL, C.K., Modal solutions for the dynamic plastic deformation of a beam *[Argonne Natl. Lab., Argonne, IL, USA]*

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SAWAI, S., WAKABAYASHI, T., FUKUMURA, N., Characteristics of plutonium utilization in the Heavy-Water-Moderated, boiling-light-water-cooled Reactor ATR *[Power Reactor & Nucl. Fuel Dev. Corp., Tokyo, Japan]*

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MOORTHY, R.I.K., RAO, A.R., KAKODKAR, A., Diagnosis and cure of Dhruva fuel vibration *[Bhabha Atom Res. Ctr., Bombay, India]*

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GOSHIMA, T., MIYAO, K., Transient thermal stresses in a hollow cylinder subjected to γ-ray heating and convective heat losses *[Toyama Univ., Toyama, Japan]*

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KLÖCKER, H., MONTHEILLET, F., Influence of flow rule and inertia on the ductile growth of voids *[Ecole Mines, St. Etienne, France]*

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SCHNEIDER, U., Introduction to fire safety in nuclear power plants *[Tech. Univ. Vienna, Vienna, Austria]*

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KELLY, D.L., Overview of containment venting as an accident mitigation strategy in United States light water reactors *[EG&G Idaho Inc., Idaho Natl. Engn. Lab., Idaho Falls, ID, USA]*

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JOST, S.D., MO, Y.L., An algorithm for seismic analysis of low-rise structural walls *[DE Paul Univ., Chicago, IL, USA; Natl. Cheng Kung Univ., Tainan, Taiwan]*

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FILSS, P., Fissile material detection by active neutron interrogation with radioactive neutron sources *[KFA Jülich GmbH, Jülich, Germany]*

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BRIDGEMAN, J., SHANKAR, R., Erosion/corrosion data handling for reliable NDE *[Environm. Protect. Res. Inst., Charlotte, NC, USA; North States Power Co., Minneapolis, MN, USA]*

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MCDONALD, N.R., NJO, D.H., NICHOLS, R.W., An overview of the CSNI-PWG3 Workshop on the complementary roles of fracture mechanics and NDE in safety assessments of components *[Swiss Fed. Nucl. Safety Inspectorate, Wurenlingen, Switzerland]*

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MALMBERG, B., Swedish approach and experience with inspections of austenitic components in the primary circuit of BWR's *[Sydkraft AB, Loddeköpinge, Sweden]*

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COWFER, C.D., Basis/background for ASME Code Section XI proposed Appendix VIII: Ultrasonic examination performance demonstration *[Southwestern Res. Inst., San Antonio, TX, USA]*

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MIYOSHI, S., Research and development of ISI techniques in Japan *[Japan Power Engn. & Inspect. Corp., Tokyo, Japan]*

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MAEDA, N., YAGAWA, G., Some experiences and development in Japan related to nondestructive examination and fracture mechanics in structural integrity assessment of nuclear power plant components *[Japan Power Engn. & Inspect. Corp., Yokohama, Kanagawa, Japan; Univ. Tokyo, Tokyo, Japan]*

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YOSHIDA, K., KATAOKA, S., OKAMOTO, A., Plant service continuance approach through periodical examination *[Ishikawajima Harima Heavy Ind. Co. Ltd., Yokohama, Kanagawa, Japan]*

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HADA, K., NISHIGUCHI, I., MUTO, Y., TSUJI, H., Developments of metallic materials and a high-temperature structural design code for the HTTR *[Japan Atom Energy Res. Inst., Oarai, Ibaraki, Japan; Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan]*

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HADA, K., OHKUBO, M., BABA, O., Application of new design methodologies to very high-temperature metallic components of the HTTR *[Japan Atom Energy Res. Inst., Oarai, Ibaraki, Japan]*

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IYOKU, T., SHIOZAWA, S., ISHIHARA, M., ARAI, T., OKU, T., Graphite core structures and their structural design criteria in the HTTR *[Ibaraki Univ., Hitachi, Ibaraki, Japan; Japan Atom Energy Res. Inst., Oarai, Ibaraki, Japan; Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan]*

Vol. 132 No. 1 (1992) 31-37
OGAWA, T., KOBAYASHI, F., TOBITA, T., FUKUDA, K., SAITOH, T., YOKOUCHI, I., OBATA, M., Release of short-lived noble gases from HTGR fuel with failed coated fuel particles and contaminated matrix *[Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan]*

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SHINDO, M., OKAMOTO, F., KUNITOMI, K., FUJITA, S., SAWA, K., Safety characteristics of the High Temperature Engineering Test Reactor *[Japan Atom Energy Res. Inst., Oarai, Ibaraki, Japan]*

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OBERPICHLER, R., Design criteria for liners of concrete vessels of future HTRs *[Stangenberg Schnellenbach & Partner Berat. Ing. GmbH, Bochum, Germany]*

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SCHIMMELPFENNIG, K., Design criteria for prestressed concrete pressure vessels for High Temperature Reactors *[Stangenberg Schnellenbach & Partner Berat. Ing. GmbH, Bochum, Germany]*

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NEUMANN, G., HEIDT, K., DUMM, K., ROTHFUSS, H., The HTR module pressure vessel unit; design criteria and safety philosophy *[Interatom GmbH, Bergisch Gladbach, Germany; Siemens AG, KWU, Erlangen, Germany]*

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SCHUBERT, F., NICKEL, H., BREITBACH, G., Structural design criteria for HTR - a summary report *[KFA Jülich GmbH, Jülich, Germany]*

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SAITO, S., TANAKA, T., SUDO, Y., Present status of the High Temperature Engineering Test Reactor (HTTR) *[Japan Atom Energy Res. Inst., Oarai, Ibaraki, Japan]*

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WANG, D.Z., ZHONG, D.X., XU, Y.H., The Status of HTGR Research and Development in China *[Tsing Hua Univ., Beijing, P.R. China]*

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LANGHANS, J., Testing, verification and application of CONTAIN for severe accident analysis of LMFBR-containments *[Ges. Reaktorsicherheit GmbH, Cologne, Germany]*

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CONGLETON, J., HEMSWORTH, B., PARKINS, R.N., SINGH, P.M., Effects of heat treatments on the stress corrosion cracking of alloy 600 in high temperature waters *[HM Nucl. Installat. Inspectorate, London, England; Univ. Newcastle upon Tyne, Newcastle upon Tyne, Tyne & Wear, England]*

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MEHEDINTEANU, S., DEACONU, L., CHIRLESAN, D., A model of failure criteria based on the bifurcation theory for nuclear fuel element cladding *[Inst. Power Studies & Design, Bucharest, Romania]*

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CHEN, W.-H., HUANG, C.-C., Three-dimensional thermoelastic analysis of a cylindrical pipe with an internal surface crack under convection cooling *[Natl. Tsing Hua Univ., Hsinchu, Taiwan]*

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FURUTANI, A., IMAHORI, S., SATO, K., SAITO, M., Erosion behavior of a solid plate by a liquid jet - Effect of molten layer *[Power Reactor & Nucl. Fuel Dev. Corp., Oarai, Ibaraki, Japan]*

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SATO, K., FURUTANI, A., SAITO, M., ISOZAKI, M., SUGANUMA, K., IMAHORI, S., Melting attack of solid plates by a high-temperature liquid jet [II]. - Erosion behavior by a molten metal jet *[Power Reactor & Nucl. Fuel Dev. Corp., Oarai, Ibaraki, Japan]*

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D'AURIA, F., GALASSI, G.M., VIGNI, P., CALASTRI, A., Scaling of natural circulation in PWR systems *[Dipartimento Costruzioni Meccan. & Nucl., Pisa, Italy]*

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FABRIZI, F., SALA, M., HETSRONI, G., Dynamic behavior of a steam generator *[Ansaldo Componenti S.p.A., Milan, Italy; Ente Nazl. Energia Atom, Rome, Italy; Technion Israel Inst. Technol., Haifa, Israel]*

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CHANG, S.H., BAEK, W.-P., BAE, T.M., A study of critical heat flux for low flow of water in vertical round tubes under low pressure *[Korea Adv. Inst. Sci. & Technol., Taejon, South Korea]*

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KATANISHI, S., SOBAJIMA, M., FUJISHIRO, T., Quenching degradation in-pile experiment on an oxidized fuel rod in the temperature range of 1000 to 1260 °C *[Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan]*

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SUGAWARA, S., SAKAI, T., WATANABE, K., RUMMENS, H.E.C., Subchannel analysis by the FIDAS code based on the three-fluid model *[Atom Energy Canada Ltd. Res., Chalk River Nucl. Labs, Chalk River, Ontario, Canada; Century Res. Ctr. Corp. Ltd., Tokyo, Japan; Power Reactor & Nucl. Fuel Dev. Corp., Oarai, Ibaraki, Japan]*

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USHIJIMA, S., TAKEDA, H., TANAKA, N., Image-processing system for velocity-measurements in natural-convection flows *[Cent. Res. Inst. Elect. Power Ind., Abiko, Chiba, Japan]*

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GUIDO, G., CONVERTI, J., Experimental study on density-wave oscillations in two identical channels *[Comis. Nacl. Energia Atom, Bariloche, Argentina; Inst. Balseiro, Bariloche, Argentina]*

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AHMADI, G., SU, L., Equipment response spectra for base-isolated shear beam structures *[Clarkson Univ., Potsdam, NY, USA]*

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MONTGOMERY, R.O., RASHID, Y.R., KJAER-PEDERSEN, N., Theoretical evaluation of rifled cladding for LWR fuel: A study based on the computer codes INTERPIN and FREY-01 *[Anatech Res. Corp., La Jolla, CA, USA; Sentinel Anal. Inc., Los Gatos, CA, USA]*

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BARAKAT, A.-R.I., TODREAS, N.E., Mixed convection recirculation flow in a vertical single-rod channel connected to an upper plenum *[MIT, Cambridge, MA, USA]*

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LIAO, L.-Y., Study and application of boiling water reactor jet pump characteristic *[Inst. Nucl. Energy Res., Lungtan, Taiwan]*

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GUELLOUZ, M.S., TAVOULARIS, S., Heat transfer in rod bundle subchannels with varying rod-wall proximity *[Univ. Ottawa, Ottawa, Ontario, Canada]*

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VASIC, A., CHENG, S.C., GROENEVELD, D.C., A comparison of predictions of high-temperature steam properties *[Univ. Ottawa, Ottawa, Ontario, Canada]*

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KOIZUMI, Y., KUMAMARU, H., MIMURA, Y., MURAKAMI, H., TASAKA, K., Pool-boiling/bubbling void fraction in an annular flow channel *[Isl. Co., Mito, Ibaraki, Japan; Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan; Sumikyo Engn. Co., Imabari, Ehime, Japan]*

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MACGRATH, D., YANG, G., EBADIAN, M.A., Conjugated heat transfer in a concentric annular pipe *[Florida Int. Univ., Miami, FL, USA]*

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WICKETT, A.J., BRITTAIN, I., Quantifying reactor safety margins: What remains to be done *[UKAEA Technol., Winfrith Technol. Ctr., Dorchester, Dorset, England]*

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HOCHREITER, L.E., Quantifying Reactor Safety Margins – comment *[Westinghouse Elect. Corp., Pittsburgh, PA, USA]*

Vol. 132 No. 3 (1992) 411-414
HOFER, E., KARWAT, H., WERNER, W., Quantifying Reactor Safety Margins – comment *[Ges. Reaktorsicherheit GmbH, Garching, Germany]*

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HOLMSTRÖM, H., TUOMISTO, H., Applicability of the CSAU methodology to safety assessments *[Imatra Power Co., Vantaa, Finland; OECD Nucl. Energy Agcy., Paris, France]*

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SURSOCK, J.-P., Quantifying Reactor Safety Margins – comment *[Elect. Power Res. Inst., Palo Alto, CA, USA]*

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PETRANGELI, G., Quantifying Reactor Safety Margins – comment *[Ente Nazl. Energia Atom, Rome, Italy]*

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SHIBA, M., Quantifying Reactor Safety Margins – comment *[Japan Inst. Nucl. Safety, Tokyo, Japan]*

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YADIGAROGLU, G., Quantifying Reactor Safety Margins – comment *[Swiss Fed. Inst. Technol., Zurich, Switzerland]*

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WILSON, G.E., BOYACK, B.E., CATTON, I., DUFFEY, R.B., GRIFFITH, P., KATSMA, K.R., LELLOUCHE, G.S., LEVY, S., ROHATGI, U.S., WULFF, W., ZUBER, N., Response to the foregoing letters-to-the-editor *[Brookhaven Natl. Lab., Upton, NY, USA; EG&G Idaho Inc., Idaho Natl. Engn. Lab., Idaho Falls, ID, USA; Los Alamos Natl. Lab., Los Alamos, NM, USA; MIT, Cambridge, MA, USA; S. Levy Inc., Campbell, CA, USA; US Nucl. Regulatory Commiss., Rockville, MD, USA; Univ. Calif. Los Angeles, Los Angeles, CA, USA]*

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HOCHREITER, L.E., ANKNEY, R.D., YOUNG, M.Y., KALRA, S.P., Application of PWR LOCA margin with the revised Appendix K rule *[Elect. Power Res. Inst., Palo Alto, CA, USA; Westinghouse Elect. Corp., Pittsburgh, PA, USA]*

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BERNARD, J.L., VAGNER, J., PELLISSIER-TANON, A., FAURE, F., Effect of residual stresses and complex loadings on the fatigue behavior of underclad cracks *[Framatome France, Paris, France]*

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BAUERNFEIND, V., BLOEM, TH., PACHE, W., DIEDERICH, H.J., Vibration monitoring of the primary piping system during the hot functional tests of the Mülheim-Kärlich PWR *[ASEA Brown Boveri AG, Mannheim, Germany; Ges. Reaktorsicherheit GmbH, Garching, Germany; RWE Energie AG, Mülheim-Karlich, Germany]*

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REMY, F.N., BOUCHACOURT, M., Flow-assisted corrosion: a method to avoid damage *[Elect. France, Serv. Etud. & Projets Therm. & Nucl., Villeurbanne, France]*

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GERBER, T.L., DEARDORFF, A.F., NORRIS, D.M., LUCAS, W.F., Acceptance criteria for structural evaluation of erosion-corrosion thinning in carbon steel piping *[Elect. Power Res. Inst., Palo Alto, CA, USA; Struct. Integr. Assoc. Inc., San Jose, CA, USA; Yankee Atom Elect. Co., Westborough, MA, USA]*

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MOREL, A.R., REYNES, L.J., Short-term degradation mechanisms of piping *[Elect. France, Serv. Etud. & Projets Therm. & Nucl., Villeurbanne, France]*

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BRIEGLEB, P., MIGNOT, P., Review of the Belgian experience of reactor core internal components *[AIB Vincotte, Brussels, Belgium]*

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WARE, A.G., SHAH, V.N., Age-related degradation of boiling water reactor vessel internals *[EG&G Idaho Inc., Idaho Natl. Engn. Lab., Idaho Falls, ID, USA]*

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ROUSSEL, G., MIGNOT, P., Behaviour of steam generator tubes in Belgium and its consequences *[AIB Vincotte, Brussels, Belgium]*

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BADANIN, V., DRAGUNOV, Y.G., FEDOROV, V., GORYNIN, I., NICKOLAEV, V., Application of annealing for extension of WWER vessel lives *[No address]*

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TSAI, Y.M., LIU, S.N., LIGHT, G.M., Crack-depth effects in the cylindrically guided wave technique for bolt and pump-shaft inspections *[Elect. Power Res. Inst., Palo Alto, CA, USA; Iowa State Univ. Sci. & Technol., Ames, IA, USA; Southwestern Res. Inst., San Antonio, TX, USA]*

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LUONG, M.P., Fracture testing of concrete and rock materials *[Ecole Polytech., CNRS, Mecan. Solides Lab., Palaiseau, France]*

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RAMTANI, S., BERTHAUD, Y., MAZARS, J., Orthotropic behavior of concrete with directional aspects: modelling and experiments *[Greco Rheol. Geomat., St. Martin d'Heres, France; Univ. Paris 06, Ecole Normale Super Cachan, CNRS, Mec. & Tech. L, Cachan, France]*

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JOKELA, J., Long-term tests of reinforced concrete beams loaded by temperature gradient or settlement of a support *[Tech. Res. Ctr. Finland, Espoo, Finland]*

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SUZUKI, T., TAKIGUCHI, K., HOTTA, H., Leakage of gas through concrete cracks *[Tokyo Inst. Technol., Tokyo, Japan]*

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AMIR-MAZAHERI, D., BOLVIN, M., MOINET, J., French 1500 MW fast-reactor project: proposal for a reactor-bearing concrete slab *[Elect. France, Serv. Etud. & Projets Therm. & Nucl., Villeurbanne, France; SEEE Struct., Courbevoie, France]*

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PFEIFFER, P.A., KENNEDY, J.M., MARCHERTAS, A.H., Post-test analysis for the nonlinear response of an internally pressurized one sixth scale reinforced concrete containment model *[Argonne Natl. Lab., Argonne, IL, USA; North Illinois Univ., De Kalb, IL, USA]*

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FANOUS, F., GREIMANN, L., WASSEF, W., Analysis of an ice-condenser containment building anchorage system *[Iowa State Univ. Sci. & Technol., Ames, IA, USA]*

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PADMANABHAN, M., LE CLAIR, M.L., CHANDRA, S., GRONDAHL, E., Flow distribution at the bottom region of a steam generator tube bundle *[Alden Res. Lab. Inc., Holden, MA, USA; Northeast Utilities, Berlin, CT, USA]*

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SAUDY, A., GHOBARAH, A., AZIZ, T.S., A modified CCFS approach for the seismic analysis of multiply supported MDOF secondary systems *[Atom Energy Canada Ltd. Res., Sheridan Pk. Res. Community, Mississauga, Ontario, Canada; McMaster Univ., Hamilton, Ontario, Canada]*

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GHOSH, A.K., A semi analytical model for Fourier amplitude spectrum of earthquake ground motion *[Bhabha Atom Res. Ctr., Bombay, India]*

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HARKNESS, H.H., BELYTSCHKO, T., LIU, W.K., Finite element reliability analysis of fatigue life *[Northwestern Univ., RR Mccormick Sch. Engn. & Appl. Sci., Evanston, IL, USA]*

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HIROE, T., IGARI, T., The viscoplasticity theory applied to the inelastic analysis at elevated temperatures *[Kumamoto Univ., Kumamoto, Japan; Mitsubishi Heavy Ind. Co. Ltd., Nagasaki, Japan]*

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MEHEDINTEANU, S., Recent new improvements of computer codes for nuclear fuel elements performance analysis *[Inst. Power Studies & Design, Bucharest, Romania]*

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MIYAZAKI, N., HAGIHARA, S., UEDA, T., MUNAKATA, T., SODA, K., Finite element dynamic bifurcation buckling analysis of torispherical head of BWR containment vessel subjected to internal pressure *[Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan; Kyushu Univ., Fac. Engn., Fukuoka, Japan]*

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ZAHOOR, A., A compound crack in a pipe under tension *[Zenith Corp., Rockville, MD, USA]*

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GLAESER, H., Downcomer and tie plate countercurrent flow in the Upper Plenum Test Facility (UPTF) *[Ges. Reaktorsicherheit GmbH, Garching, Germany]*

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WANG, Z., ALMENAS, K., DI MARZO, M., HSU, Y.Y., UNAL, C., Impact of rapid condensations of large vapor spaces on natural circulation in integral systems *[Univ. Maryland, Columbia, MD, USA]*

Vol. 133 No. 3 (1992) 317-324
COCKS, A.C.F., PONTER, A.R.S., CARTER, K.F., Inelastic deformation and rupture under severe thermal loading *[Univ. Leicester, Leicester, England]*

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PRATESI, F., ZONFRILLO, G., DEL PUGLIA, A., Fatigue maps and multistage life prediction methods *[Univ. Florence, Florence, Italy]*

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KUWABARA, K., TAKAHASHI, Y., KAWAGUCHI, S., FUKUDA, Y., FUKAKURA, J., Fatigue strength of dissimilar welded joints for the main vessel of an LMFBR *[Elect. Power Ind., Tokyo, Japan; Hitachi Ltd., Hitachi, Ibaraki, Japan; Mitsubishi Heavy Ind. Co. Ltd., Osaka, Japan; Toshiba Co. Ltd., Yokohama, Kanagawa, Japan]*

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LEMAITRE, J., BENALLAL, A., MARQUIS, D., Lifetime prediction of structures in anisothermal viscoplasticity coupled to damage *[Univ. Paris 06, Ecole Normale Super Cachan, CNRS, Mec. & Tech. L, Cachan, France]*

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ASADA, Y., SHIMAKAWA, T., KITAGAWA, M., KODAIRA, T., WADA, Y., ASAYAMA, T., Analytical evaluation method of *J*-integral in creep-fatigue fracture for type 304 stainless steel *[Ishikawajima Harima Heavy Ind. Co. Ltd., Tokyo, Japan; Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan; Kawasaki Heavy Ind. Co. Ltd., Tokyo, Japan; Power Reactor & Nucl. Fuel Dev. Corp., Oarai, Ibaraki, Japan; Univ. Tokyo, Tokyo, Japan]*

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OHNO, N., WANG, J., Nonisothermal constitutive modeling of inelasticity based on bounding surface *[Nagoya Univ., Nagoya, Aichi, Japan]*

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MCDOWELL, D.L., ANTOLOVICH, S.D., OEHMKE, R.L.T., Mechanistic considerations for TMF life prediction of nickel-base superalloys *[Georgia Inst. Technol., Atlanta, GA, USA]*

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KREMPL, E., CHOI, S.H., Viscoplasticity theory based on overstress: the modeling of ratchetting and cyclic hardening of AISI type 304 stainless steel *[Rensselaer Polytech. Inst., Troy, NY, USA]*

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POPELAR, C.H., SHEU, Y.C., The characteristics of viscoplastic effects in dynamic crack propagation in nuclear reactor pressure vessel steels *[Modern Engn. Serv., Warren, MI, USA; Ohio State Univ., Columbus, OH, USA]*

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BASS, B.R., KEENEY-WALKER, J., CHANG, S.-J., PARROT, J.S., PUGH, C.E., HORNBERGER, K., SCHWARTZ, C.W., Viscoplastic modeling of dynamic fracture events in reactor pressure vessel steels *[KFZ Karlsruhe GmbH, Karlsruhe, Germany; Oak Ridge Natl. Lab., Oak Ridge, TN, USA; Univ. Maryland, College Park, MD, USA]*

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NISHIOKA, T., FUJIMOTO, T., SAKAI, K., MURAKAMI, T., SAKAKURA, K., A method of caustics for the direct experimental measurement of the *T**-integral in nonlinear and dynamic fracture mechanics problems *[Kobe Univ. Mercantile Marine, Kobe, Hyogo, Japan]*

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HSU, T.-R., Computational thermofracture mechanics and life prediction *[San Jose State Univ., San Jose, CA, USA]*

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NILSSON, F., Numerical investigation of *J*-characterization of growing crack tips *[Royal Inst. Technol., Stockholm, Sweden]*

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ASADA, Y., KITAGAWA, M., SHIMAKAWA, N., KODAIRA, T., ASAYAMA, T., WADA, Y., Standardization of procedures for the high-temperature crack growth testing for FBR materials in Japan *[Ishikawajima Harima Heavy Ind. Co. Ltd., Tokyo, Japan; Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan; Kawasaki Heavy Ind. Co. Ltd., Tokyo, Japan; Power Reactor & Nucl. Fuel Dev. Corp., Oarai, Ibaraki, Japan; Univ. Tokyo, Tokyo, Japan]*

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KOLLMANN, F.G., Viscoplastic analysis of shells of revolution under axisymmetric loads *[TH Darmstadt, Darmstadt, Germany]*

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WATASHI, K., FURUHASHI, I., YOSHIDA, H., Analytical crack growth evaluation of a plate with a surface crack *[Century Res. Ctr. Corp. Ltd., Tokyo, Japan; Power Reactor & Nucl. Fuel Dev. Corp., Oarai, Ibaraki, Japan]*

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LARABI, M., BUFF, B., GRANGER, S., Numerical simulation of local non-linearities due to tube-support interaction *[Elect. France, Div. R&D, Clamart, France]*

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AINSWORTH, R.A., BUDDEN, P.J., Approximate inelastic analysis of defective components *[Berkeley Nucl. Labs, Berkeley, Glos, England]*

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DONEA, J., BELYTSCHKO, T., Advances in computational mechanics *[Commiss. European Communities, Euratom, Joint Res. Ctr., Ispra, Italy; Northwestern Univ., Evanston, IL, USA]*

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BILLONE, M.C., MONTGOMERY, R.O., RASHID, Y.R., HEAD, J.L., Advancements in the behavioral modeling of fuel elements and related structures *[Anatech Res. Corp., San Diego, CA, USA; Argonne Natl. Lab., Argonne, IL, USA; Royal Naval Coll., London, England]*

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CHANG, Y.W., EGGEN, D.T., IMAZU, A., LIVOLANT, M., Advances in the analysis of fast reactor core and coolant circuit structures *[CEA, CEN, IPSN, Fontenay Aux Roses, France]*

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CRUTZEN, S.J., NICHOLS, R.W., KUSSMAUL, K., YAGAWA, G., Developments in fracture mechanics and non-destructive examination *[Commiss. European Communities, Euratom, Joint Res. Ctr., Ispra, Italy; Nichols Consultancies, Warrington, Cheshire, England; Univ. Stuttgart, Stuttgart, Germany; Univ. Tokyo, Tokyo, Japan]*

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STEVENSON, J.D., EIBL, J., CURBACH, M., JOHNSON, T.E., DAYE, M.A., RIERA, J.D., KRUTZIK, N.J., NEMET, J., IYENGAR, K.T.S., Advances in the analysis and design of concrete structures, metal containments and liner plate for extreme loads *[Austrian Res. Ctr., Seibersdorf, Austria; Bechtel Power Corp., Gaithersburg, MD, USA; Indian Inst. Sci., Dept. Aerosp. Engn., Bangalore, Karnataka, India; Siemens AG, KWU, Offenbach, Germany; Stevenson & Assoc., Cleveland, OH, USA; Univ. Fed. Rio Grande Sul, Porto Alegre, RS, Brazil; Univ. Karlsruhe, Karlsruhe, Germany]*

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GRIEGER, G., Advances in the mechanical and thermal design of fusion reactors *[Max Planck Inst., Garching, Germany]*

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SCHUELLER, G.I., ANG, A.H.-S., Advances in structural reliability *[Univ. Calif. Irvine, Irvine, CA, USA; Univ. Innsbruck, Innsbruck, Austria]*

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APOSTOLAKIS, G., KAFKA, P., Advances in probabilistic safety assessment *[Ges. Reaktorsicherheit GmbH, Garching, Germany; Univ. Calif. Los Angeles, Los Angeles, CA, USA]*

Vol. 134 No. 2-3 (1992) 153-158
MODEEN, D.J., OEHLBERG, R.N., United States nuclear industry perspective on accident management *[Elect. Power Res. Inst., Palo Alto, CA, USA; Nucl. Management & Resources Council Inc., Washington, DC, USA]*

Vol. 134 No. 2-3 (1992) 159-176
LOHNERT, G.H., The consequences of water ingress into the primary circuit of an HTR-Module – From design basis accident to hypothetical postulates *[Siemens AG, KWU, Bergisch Gladbach, Germany]*

Vol. 134 No. 2-3 (1992) 177-197
PARKS, M.B., CLAUSS, D.B., Performance of containment penetrations under severe accident loadings *[Sandia Natl. Labs, Albuquerque, NM, USA]*

Vol. 134 No. 2-3 (1992) 199-215
SHAH, V.N., LOWENSTEIN, D.B., TURNER, A.P.L., WARD, S.R., GORMAN, J.A., MACDONALD, P.E., WEIDENHAMER, G.H., Assessment of primary water stress corrosion cracking of PWR steam generator tubes *[EG&G Idaho Inc., Idaho Natl. Engn. Lab., Idaho Falls, ID, USA; Nucl. Regulatory Commiss., Washington, DC, USA]*

Vol. 134 No. 2-3 (1992) 217-226
HACKETT, E.M., JOYCE, J.A., Use of *J-R* curves in assessing the fracture behavior of low upper shelf toughness materials *[David Taylor Res. Ctr., Annapolis, MD, USA; USN Acad., Annapolis, MD, USA]*

Vol. 134 No. 2-3 (1992) 227-243
CORWIN, W.R., NANSTAD, R.K., ISKANDER, S.K., HAGGAG, F.M., Heavy-Section Steel Irradiation Program summary *[Oak Ridge Natl. Lab., Oak Ridge, TN, USA]*

Vol. 134 No. 2-3 (1992) 245-256
CHRISTENSEN, J.A., Managing aging in nuclear power plants *[Battelle Mem. Inst., Pacific Northwestern Labs, Richland, WA, USA]*

Vol. 134 No. 2-3 (1992) 257-265
SCOTT, W.B., ENDERLIN, W.I., CHOCKIE, A.D., BJORKELO, K.A., Good practices for effective maintenance to manage aging of nuclear power plants *[Battelle Mem. Inst., Seattle, WA, USA; Battelle Mem. Inst., Pacific Northwestern Labs, Richland, WA, USA]*

Vol. 134 No. 2-3 (1992) 267-275
JACOBUS, M.J., Loss-of-Coolant Accident (LOCA) testing of aged cables with application to nuclear plant life extension *[Sandia Natl. Labs, Albuquerque, NM, USA]*

Vol. 134 No. 2-3 (1992) 277-282
KNOEDLER, H.G., A systems engineered approach towards improved safety and performance of valves *[Siemens Nucl. Power Serv. Inc., Rockville, MD, USA]*

Vol. 134 No. 2-3 (1992) 283-294
HAYNES, H.D., Evaluation of check valve monitoring methods *[Oak Ridge Natl. Lab., Oak Ridge, TN, USA]*

Vol. 134 No. 2-3 (1992) 295-309
AMICK, D., GELINAS, R., MOORE, D., BILLINGTON, E., MAURATH, G., Paleoliquefaction studies along the Atlantic seaboard: Implications for long-term seismic hazard *[Ebasco Serv. Inc., Greensboro, NC, USA; Univ. South Carolina, Columbia, SC, USA]*

Vol. 134 No. 2-3 (1992) 311-317
BANDYOPADHYAY, K., HOFMAYER, C., Parametric study of relay seismic capacity *[Brookhaven Natl. Lab., Upton, NY, USA]*

Vol. 134 No. 2-3 (1992) 319-330
CARTER, R.J., Human factors survey of advanced instrumentation and controls technologies in nuclear plants *[Oak Ridge Natl. Lab., Oak Ridge, TN, USA]*

Vol. 134 No. 2-3 (1992) 331-340
O'HARA, J., HIGGINS, J., LUCKAS, W., CROUCH, D., The effects of local control station design variation on human performance and plant risk *[Brookhaven Natl. Lab., Upton, NY, USA]*

Vol. 134 No. 2-3 (1992) 341-354
HAUGSET, K., BERG, Ø., BOLOGNA, S., FØRDESTRØMMEN, N.T., KVALEM, J., NELSON, W.R., YAMANE, N., Improving safety through an integrated approach for advanced control room development *[OECD, Halden Reactor Project, Halden, Norway]*

Vol. 134 No. 2-3 (1992) 355-370
SAMANTA, P.K., VESELY, W.E., KIM, I.S., Toward risk-based control of nuclear power plant configurations *[Brookhaven Natl. Lab., Upton, NY, USA]*

Vol. 134 No. 2-3 (1992) 371-380
WOODS, D.D., POPLE, H.E. (JR.), ROTH, E.M., Cognitive environment simulation: a tool for modeling intention formation for human reliability analysis *[Ohio State Univ., Columbus, OH, USA; Seer Syst., Pittsburgh, PA, USA; Univ. Pittsburgh, Pittsburgh, PA, USA; Westinghouse Elect. Corp., Pittsburgh, PA, USA]*

Vol. 135 No. 1 (1992) 1-27
BREEDING, R.J., HELTON, J.C., GORHAM, E.D., HARPER, F.T., Summary description of the methods used in the probabilistic risk assessments for NUREG-1150 *[Arizona State Univ., Tempe, AZ, USA; Sandia Natl. Labs, Albuquerque, NM, USA]*

Vol. 135 No. 1 (1992) 29-59
BREEDING, R.J., HELTON, J.C., MURFIN, W.B., SMITH, L.N., JOHNSON, J.D., JOW, H.-N., SHIVER, A.W., The NUREG-1150 probabilistic risk assessment for the Surry Nuclear Power Station *[Appl. Phys. Inc., Nanuet, NY, USA; Arizona State Univ., Tempe, AZ, USA; Sandia Natl. Labs, Albuquerque, NM, USA; Sci. Applicat. Int. Corp., San Diego, CA, USA]*

Vol. 135 No. 1 (1992) 61-94
PAYNE, A.C. (JR.), BREEDING, R.J., HELTON, J.C., SMITH, L.N., JOHNSON, J.D., JOW, H.-N., SHIVER, A.W., The NUREG-1150 probabilistic risk assessment for the Peach Bottom Atomic Power Station *[Arizona State Univ., Tempe, AZ, USA; Sandia Natl. Labs, Albuquerque, NM, USA; Sci. Applicat. Int. Corp., San Diego, CA, USA]*

Vol. 135 No. 1 (1992) 95-115
GREGORY, J.J., BREEDING, R.J., HELTON, J.C., MURFIN, W.B., HIGGINS, S.J., SHIVER, A.W., The NUREG-1150 probabilistic risk assessment for the Sequoyah Nuclear Plant *[Arizona State Univ., Tempe, AZ, USA; Sandia Natl. Labs, Albuquerque, NM, USA]*

Vol. 135 No. 1 (1992) 117-137
BROWN, T.D., BREEDING, R.J., HELTON, J.C., JOW, H.-N., HIGGINS, S.J., SHIVER, A.W., The NUREG-1150 probabilistic risk assessment for the Grand Gulf Nuclear Station *[Arizona State Univ., Tempe, AZ, USA; Sandia Natl. Labs, Albuquerque, NM, USA]*

Vol. 135 No. 2 (1992) 141-149
BHANDARI, S., FAIDY, C., ACKER, D., Computation of leak areas of circumferential cracks in piping for application in demonstrating leak-before-break behaviour *[CEA, CENS, IRDI, Gif sur Yvette, France; Elect. France, Serv. Etud. & Projets*

Therm. & Nucl., Villeurbanne, France; Framatome France, Paris, France]

Vol. 135 No. 2 (1992) 151-160
BROCKS, W., KRAFKA, H., KÜNECKE, G., WOBST, K., Stable crack growth of axial flaws in pressure vessels *[Bundesanstalt Materialprüfung, Berlin, Germany]*

Vol. 135 No. 2 (1992) 161-170
GREBNER, H., HÖFLER, A., Crack opening and leak rate evaluation for piping components with through cracks *[Ges. Reaktorsicherheit GmbH, Cologne, Germany]*

Vol. 135 No. 2 (1992) 171-178
HUNTER, C.P., HURST, R.C., Creep crack growth verification testing in Alloy 800H tubular components *[IRSID, Firminy, France; Inst. Adv. Mat., Petten, Netherlands]*

Vol. 135 No. 2 (1992) 179-186
KASHIMA, K., MATSUBARA, M., MIURA, N., ANDO, Y., TAKUMI, K., Analyses of fatigue crack growth and fracture in carbon steel piping *[Elect. Power Ind., Tokyo, Japan; Univ. Tokyo, Tokyo, Japan]*

Vol. 135 No. 2 (1992) 187-196
KIM, Y.J., YANG, W.H., CHOY, Y.S., LEE, J.S., An interaction analysis of twin surface cracks by the line-spring model *[Sung Kyun Kwan Univ., Suwon, South Korea]*

Vol. 135 No. 2 (1992) 197-205
NAUS, D.J., KEENEY-WALKER, J., BASS, B.R., FIELDS, R.J., DE WIT, R., LOW, S.R. (III), Wide-plate crack-arrest tests utilizing prototypical and degraded (simulated) pressure vessel steels *[Natl. Inst. Stand & Technol., Gaithersburg, MD, USA; Oak Ridge Natl. Lab., Oak Ridge, TN, USA]*

Vol. 135 No. 2 (1992) 207-224
SUO, X.-Z., COMBESCURE, A., On the application of $G(\theta)$ method and its comparison with De Lorenzi's approach *[CEA, CENS, IRDI, Gif sur Yvette, France; Eurosim SARL, Les Ulis, France]*

Vol. 135 No. 2 (1992) 225-237
TROSHCHENKO, V.T., POKROVSKY, V.V., KAPLUNENKO, V.G., KARZOV, G.P., TIMOFEYEV, V.T., DRAGUNOV, Y.G., The effect of metallurgical factors on crack resistance of pressure-vessel materials *[Acad. Sci. UkSSR, Inst. Problems Strength, Kiev, Ukraine]*

Vol. 135 No. 2 (1992) 239-246
WALLIN, K., TÖRRÖNEN, K., AHLSTRAND, R., TIMOFEEV, B., RYBIN, V., NIKOLAEV, V., MOROZOV, A., Theory based statistical interpretation of brittle fracture toughness of reactor pressure vessel steel 15x2M ϵ A and its welds *[Imatra Power Co., Vantaa, Finland; Met. Inst. AEE, St. Petersburg, Russia; Tech. Res. Ctr. Finland, Espoo, Finland]*

Vol. 135 No. 3 (1992) 249-266
DUBEY, R.N., SAUVÉ, R.G., Numerical integration of rate constitutive equations under finite deformation *[Ontario Hydro, Toronto, Ontario, Canada; Univ. Waterloo, Waterloo, Ontario, Canada]*

Vol. 135 No. 3 (1992) 267-276
KARAGIOZOVA, D., MANOACH, E., Coupling effects in an elastic-plastic beam subjected to heat impact *[Bulgarian Acad. Sci., Inst. Mech. & Biomech., Sofia, Bulgaria]*

Vol. 135 No. 3 (1992) 277-285
YAGHOUBI, M.A., KARAMI, G., KARIMI, A.A., A boundary element modelling for two-dimensional transient heat conduction *[Univ. Shiraz, Sch. Engn., Shiraz, Iran]*

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SUZUKI, M., NISHIO, G., TAKADA, J., TSUKAMOTO, M., KOIKE, T., Experimental analysis on factors dominating the explosive burning of solvent in a cell of a fuel reprocessing plant *[Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan]*

Vol. 135 No. 3 (1992) 297-305
BROWN, C.A., FORD, K.L., YATES, J., Development of a solution to the debris fretting problem *[Siemens Nucl. Power Corp., Richland, WA, USA]*

Vol. 135 No. 3 (1992) 307-314
SINGH, R., RAMAMURTHY, T.S., RAO, A.K., Thermomechanical generalization in joints: on-axis pin bearing load *[Indian Inst. Sci., Dept. Aerosp. Engn., Bangalore, Karnataka, India; Natl. Aeronaut. Lab., Bangalore, Karnataka, India]*

Vol. 135 No. 3 (1992) 315-320
SINGH, R., RAMAMURTHY, T.S., RAO, A.K., Non-uniqueness of thermoelastic contact in load bearing pin joints *[Indian Inst. Sci., Dept. Aerosp. Engn., Bangalore, Karnataka, India; Natl. Aeronaut. Lab., Bangalore, Karnataka, India]*

Vol. 135 No. 3 (1992) 321-325
MOLLAH, A.S., AHMAD, G.U., HUSAIN, S.R., Measurements of neutron shielding properties of heavy concretes using a Cf^{252} source *[AERE, Inst. Nucl. Sci. & Technol., Dhaka, Bangladesh; Bangladesh Univ. Engn. & Technol., Dhaka, Bangladesh]*

Vol. 135 No. 3 (1992) 327-340
WATANABE, T., KUKITA, Y., The effect of the virtual mass term on the stability of the two-fluid model against perturbations *[Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan]*

Vol. 135 No. 3 (1992) 341-354
TAKEDA, T., HISHIDA, M., Studies on diffusion and natural convection of two-component gases *[Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan]*

Vol. 135 No. 3 (1992) 355-366
MOSAAD, M., JOHANNSEN, K., An improved correlation for subcooled and low quality film boiling heat transfer of water at pressures from 0.1 to 8 MPa *[Mansoura Univ., Fac. Engn., Mansoura, Egypt; Tech. Univ. Berlin, Berlin, Germany]*

Vol. 135 No. 3 (1992) 367-378
PARK, S.-R., BAEK, W.-P., CHANG, S.-H., LEE, B.-H., Development of an uncertainty quantification method of the best estimate large LOCA analysis *[Korea Adv. Inst. Sci. & Technol., Taejon, South Korea]*

Vol. 135 No. 3 (1992) 379-394
NA, M.G., NO, H.C., Design of an adaptive observer-based controller for the water level of steam generators *[Korea Adv. Inst. Sci. & Technol., Seoul, South Korea]*

Vol. 135 No. 3 (1992) 395-402
FREUND, H.U., SCHUMANN, S., WEGENER, H., MÜLLER, K., HDR concrete dismantling experiments with explosive charges *[Battelle Inst. eV, Frankfurt, Germany; KFZ Karlsruhe GmbH, Karlsruhe, Germany]*

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BERG, H.P., Fire protection measures in the planned Konrad repository *[Bundesamt Strahlenschutz, Salzgitter, Germany]*

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MO, Y.L., WU, H.C., Monitor of structural integrity for nuclear power plants *[Kung Shan Inst. Technol. & Commerce, Tainan, Taiwan; Natl. Cheng Kung Univ., Tainan, Taiwan]*

Vol. 135 No. 3 (1992) 419-425
FLETCHER, D.F., A comparison of coarse mixing predictions obtained from the CHYMES and PM-ALPHA models *[UKAEA Technol., Culham Lab., Culham, Oxon, England]*

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MILLS, L.E., Electricity as America enters the 21st Century *[Edison Elect. Inst., Washington, DC, USA]*

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BODANSKY, D., Global warming and nuclear power *[Univ. Washington, Seattle, WA, USA]*

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KOOMANOFF, F.A., Energy the enabler, in our changing world *[US DOE, Washington, DC, USA]*

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FULKERSON, W., JONES, J.E. (JR.), CO_2 and the world-energy system – the role of nuclear-power *[Oak Ridge Natl. Lab., Oak Ridge, TN, USA]*

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TAKETANI, K., Nuclear safety and its deployment for human beings *[Chuo Univ., Tokyo, Japan]*

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GOODJOHN, A.J., KUPITZ, J., Trends in nuclear power reactor design and technology *[Int. Atom Energy Agcy., Vienna, Austria]*

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FOSKOLOS, K., BROGLI, R., Prospects of SMSNR development in Switzerland and the influence of the evolution of district heating networks *[Paul Scherrer Inst., Villigen, Switzerland]*

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SINGH, J., BARNERT, H., New perspectives and prefeasibility results of the process heat HTR work *[KFA Jülich GmbH, Jülich, Germany]*

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DUNN, T., CARDITO, J., CUNLIFFE, J., Perspectives of modular high temperature gas-cooled reactor (MHTGR) on effluent management and siting *[Bechtel Power Corp., San Francisco, CA, USA; Gen. Atom Co., San Diego, CA, USA; Stone & Webster Engn. Corp., Boston, MA, USA]*

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GOETZMANN, C.A., GRÜNER, W., SBWR 200, a low-cost NPP with high inherent safety features *[Siemens AG, KWU, Erlangen, Germany]*

Vol. 136 No. 1-2 (1992) 73-83
MATZIE, R.A., LONGO, J., BRADBURY, R.B., TEARE, K.R., HAYNS, M.R., Design of the Safe Integral Reactor *[Combust. Engn. Inc., Windsor, CT, USA; Rolls Royce & Assoc. Ltd., Derby, England; Stone & Webster Engn. Corp., Boston, MA, USA; UKAEA Technol., Winfrith Technol. Ctr., Dorchester, Dorset, England]*

Vol. 136 No. 1-2 (1992) 85-90
DOROSZLAI, P., RÉVÉSZ, Z., Process enhanced ultimate safety with the GEYSER system *[Assoc. Consulting Engn., Baden, Switzerland; Comtag AG, Zurich, Switzerland]*

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WANG, D.Z., MA, C.W., DONG, D., LIN, J.G., Chinese nuclear heating test reactor and demonstration plant *[Tsing Hua Univ., Beijing, P.R. China]*

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HEWITT, J.S., OLIVA, A.F., Progress in design and verification of the AMPS nuclear-electric plant *[Power Syst. Inc., Ottawa, Ontario, Canada]*

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KWANT, W., BOARDMAN, C.E., PRISM liquid metal cooled reactor plant design and performance *[GE, San Jose, CA, USA]*

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DASTIDAR, P., RAO, K.V.M., Construction and operational experience with small and medium power reactors and expected improvements *[Int. Atom Energy Agcy., Vienna, Austria]*

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THEYMANN, W., Status and prospects of the HTR 500 based on the THTR 300 operation experience and recent R & D-work *[Hochtemperatur Reaktorbau GmbH, Mannheim, Germany]*

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BEINE, B., KAMINSKI, V., VON LENSA, W., Integrated design of prestressed cast-iron pressure vessel and passive heat removal system for the reactor cell of a 200 MWth modular reactor *[Interatom GmbH, Bergisch Gladbach, Germany; KFA Jülich GmbH, Jülich, Germany; Siempelkamp Giesserei GmbH, Krefeld, Germany]*

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KUGELER, K., PHLIPPEN, P.-W., SCHMIDTLEIN, P., SWATOCH, R., Passive heat removal from the core of small and medium sized pebble bed reactors *[Univ. Duisburg, Duisburg, Germany]*

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KOZIER, K.S., The Nuclear Battery: a very small reactor power supply for remote locations *[Atom Energy Canada Ltd. Res., Whiteshell Labs, Pinawa, Manitoba, Canada]*

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FURUKAWA, K., MITACHI, K., KATO, Y., Small molten-salt reactors with a rational thorium fuel-cycle *[Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan; Tokai Univ., Hiratsuka, Kanagawa, Japan; Toyohashi Univ. Technol., Toyohashi, Aichi, Japan]*

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PEDERSEN, T., PIUS – status and perspectives *[ASEA Brown Boveri Atom AB, Västerås, Sweden]*

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ALBISU, F., GARRIBBA, S.F., LEFEVRE, J.C., LEUCHS, D., VIVANTE, C., Market prospects of modular HTR in EEC countries *[Commiss. European Communities, Brussels, Belgium; Interatom GmbH, Bergisch Gladbach, Germany; Novatome, Lyon, France; Politecn. Milan, Milan, Italy; SENER, Las Arenas, Spain]*

Vol. 136 No. 1-2 (1992) 187-193
YEDIDIA, J.M., SUGNET, W.R., Utility requirements for advanced LWR passive plants *[Elect. Power Res. Inst., Palo Alto, CA, USA]*

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UCHIYAMA, M., MATSUI, K., YOKOSHIKI, K., Needs and potential applications of small and medium-sized light water reactors in Japan *[Inst. Appl. Energy, Tokyo, Japan; Japan Atom Power Co. Inc., Tokyo, Japan]*

Vol. 136 No. 1-2 (1992) 201-204
HOFFMAN, D.P., MEARS, L.D., Outlook for MHTGR project development *[Consumers Power Co., Jackson, MI, USA; Gas Cooled Reactor Assoc., San Diego, CA, USA]*

Vol. 136 No. 1-2 (1992) 205-209
SALERNO, L.N., THOMPSON, M.L., HUTCHINS, B.A., BRAUN, C., ALMR fuel cycle economics *[GE, San Jose, CA, USA; United Engn. & Constructors Inc., Philadelphia, PA, USA]*

Vol. 136 No. 1-2 (1992) 211-217
TADOKORO, Y., SATO, O., YASUKAWA, S., HAYASHI, T., Future potential of nuclear heat utilization in energy, economy and environment *[Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan]*

Vol. 136 No. 1-2 (1992) 219-227
CARVAJAL OSORIO, H., An advanced nuclear power plant for heavy oil exploitation in the Venezuelan Orinoco Oil Belt *[Inst. Venezolano Invest. Cient., Ctr. Fis., Caracas, Venezuela]*

Vol. 136 No. 1-2 (1992) 229-235
SCHAD, M.K., Utilization of process heat from the HTRM in the chemical and related industries *[Lurgi GmbH, Frankfurt, Germany]*

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RÉVÉSZ, Z., DOROSZLAI, P., Technical and economical efficiency of energy generation with the GEYSER system *[Assoc. Consulting Engn., Baden, Switzerland]*

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FORD, I.J., Axial crack propagation in fuel pin cladding tubes *[UKAEA Technol., Harwell Lab., Harwell, Oxon, England]*

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CHOU, S.I., SHAMAS-AHMADI, M., Complex variable boundary element method for torsion of hollow shafts *[DKS Assoc., Santa Ana, CA, USA; Univ. Nebraska, Lincoln, NE, USA]*

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ANDERS, D., FÖHL, J., Investigation on cyclic crack growth behaviour of reactor pressure vessel steels placed and loaded in the core region of an operating boiling water reactor *[Ges. Kernenergieverwertung Schiffbau & Schiffahrt GmbH, Geesthacht, Germany; Univ. Stuttgart, Staatliche Materialprüfungsanstalt, Stuttgart, Germany]*

Vol. 136 No. 3 (1992) 277-298
NELSON, R., UNAL, C., A phenomenological model of the thermal hydraulics of convective boiling during the quenching of hot rod bundles. Part I: Thermal hydraulic model *[Los Alamos Natl. Lab., Los Alamos, NM, USA]*

Vol. 136 No. 3 (1992) 299-318
UNAL, C., NELSON, R., A phenomenological model of the thermal-hydraulics of convective boiling during the quenching of hot rod bundles. Part II: Assessment of the model with steady-state and transient post-CHF data *[Los Alamos Natl. Lab., Los Alamos, NM, USA]*

Vol. 136 No. 3 (1992) 319-333
WILSON, G.E., WADSWORTH, D.C., MILLER, B.G., LOMMERS, L., KROEGER, P., OLSZEWSKI, M., KOCHAN, R., LIEBELT, K., Phenomena-based thermal-hydraulic modeling requirements for systems analysis of a Modular High Temperature Gas-Cooled Reactor *[Brookhaven Natl. Lab., Upton, NY, USA; EG&G Idaho Inc., Idaho Natl. Engn. Lab., Idaho Falls, ID, USA; Oak Ridge Natl. Lab., Oak Ridge, TN, USA]*

Vol. 136 No. 3 (1992) 335-346
HANSON, R.G., WILSON, G.E., ORTIZ, M.G., GRIGGS, D.P., Development of a phenomena identification and ranking table (PIRT) for a postulated double-ended guillotine break in a production reactor *[EG&G Idaho Inc., Idaho Natl. Engn. Lab., Idaho Falls, ID, USA; Westinghouse Savannah River Co., Aiken, SC, USA]*

Vol. 136 No. 3 (1992) 347-360
KANG, H.C., KIM, M.H., Measurement of three-dimensional wave form and interfacial area in an air-water stratified flow *[Pohang Inst. Sci. & Technol., Pohang, South Korea]*

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VIJAYAN, P.K., DATE, A.W., The limits of conditional stability for single-phase natural circulation with throughflow in a figure-of-eight loop *[Bhabha Atom Res. Ctr., Bombay, India; Indian Inst. Technol., Dept. Mech. Engn., Bombay, India]*

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GARLAND, W.J., WILSON, R.J., BARTAK, J., CIZEK, J., STASNY, M., ZENTRICH, I., Extensions to the approximation functions for the fast calculation of saturated water properties *[Engn. & Comp. Serv., Oakville, Ontario, Canada; McMaster Univ., Hamilton, Ontario, Canada; Natl. Res. Inst. Machine Design, Prague, Czech Republic]*

Vol. 136 No. 3 (1992) 389-399
TAMAOKI, T., TAKAHASHI, R., Simulation of fast breeder reactor noise based on two-channel core model *[Tokyo Inst. Technol., Tokyo, Japan; Toshiba Co. Ltd., Yokohama, Kanagawa, Japan]*

Vol. 136 No. 3 (1992) 401-408
YODER, G.L., CHEN, N.C.J., FELDE, D.K., NELSON, W.R., PAWEL, R.E., The effect of aluminum corrosion on the Advanced Neutron Source Reactor fuel design *[Oak Ridge Natl. Lab., Oak Ridge, TN, USA]*

Vol. 137 No. 1 (1992) 1-10
ANGLART, H., ANDERSSON, S., JADRNY, R., BWR steam line and turbine model with multiple piping capability *[ASEA Brown Boveri Atom AB, Västerås, Sweden]*

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SCHRAMMEL, D., STEINHILBER, H., Evaluation of damping values of a piping system with regard to damping values used in design codes *[Fraunhofer Inst. Betriebsfestigkeit, Darmstadt, Germany; KFZ Karlsruhe GmbH, Karlsruhe, Germany]*

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BERGER, F.P., CHONG, K., Loading of particulate filters for nuclear reactors *[Univ. London, Queen Mary & Westfield Coll., London, England]*

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ROUGE, N., DREIER, J., YANAR, S., CHAWLA, R., Experimental comparisons for bottom reflooding in tight LWHCR and standard LWR geometries *[Paul Scherrer Inst., Villigen, Switzerland]*

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AHLF, J., SCHINKEL, J., Upgrading and modernization of the High Flux Reactor Petten *[Commiss. European Communities, Joint Res. Ctr., Petten, Netherlands; Netherlands Energy Res. Fdn., Petten, Netherlands]*

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MASSIH, A.R., VESTERLUND, G., Developments in PWR cladding corrosion: materials and models *[ASEA Brown Boveri Atom AB, Västerås, Sweden]*

Vol. 137 No. 1 (1992) 65-69
BECK, W., BÖHNER, G., EBERLE, R., The Halden corrosion cycling experiment IFA-560. 2. Experimental results and their interpretation *[Siemens AG, KWU, Erlangen, Germany]*

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BARZ, H.-U., BERTRAM, W., Calculation of neutron fluence in the region of the pressure vessel for the history of different reactors by using the Monte-Carlo-method *[Forschungszentrum Rossendorf eV, Dresden, Germany; IFE Leipzig GmbH, Dresden, Germany]*

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AKKI, T.S., BENAYAD, S.A., MEGAHID, R.M., Spatial fluxes and energy distributions of reactor fast neutrons in two types of heat resistant concretes *[Tajura Nucl. Res. Ctr., Dept. Phys. & Mat. Sci., Tripoli, Libya]*

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BÜHRER, P., DUTTKE, CH., ENGEL, J., GLASS, D., Research program and test loop for the prototype of a HTR coolant gas circulator with magnetic bearings "MALVE" *[ASEA Brown Boveri AG, Mannheim, Germany]*

Vol. 137 No. 1 (1992) 89-95
HELMERS, H., KNIEPER, H., Review of the safety concept of the HTR 2 module reactor plant *[Tech. Überwachungsverein eV, Hannover, Germany]*

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DAMM, G., WEHRLEIN, R., Simulation tests for temperature mixing in a core bottom model of the HTR-Module *[Interatom GmbH, Bergisch Gladbach, Germany]*

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KINDT, T., HAQUE, H., Recriticality of the HTR-Module Power Reactor after hypothetical accidents *[Siemens AG, KWU, Bergisch Gladbach, Germany]*

Vol. 137 No. 1 (1992) 115-124
KOHTZ, N., HAQUE, H., Meeting fuel temperature limits in an HTR-Module Reactor during depressurized core heat-up *[Siemens AG, KWU, Bergisch Gladbach, Germany]*

Vol. 137 No. 1 (1992) 125-131
BRÖSKAMP, H., FUCHS, H.-P., HILTROP, W., KOLLMAR, W., MEIER, G., Improving power and cost-effectiveness at the Gösgen Nuclear Power Plant by increasing the length of the active pellet stack *[Nucl. Power Plant Gosgen Daeniken AG, Gosgen, Switzerland; Siemens AG, KWU, Erlangen, Germany]*

Vol. 137 No. 1 (1992) 133-138
MINGES, J., SAUTER, H., SCHÜTZ, W., Retention factors for fission products from sodium tests to simulate a severe LMFBR accident *[KFZ Karlsruhe GmbH, Karlsruhe, Germany]*

Vol. 137 No. 1 (1992) 139-146
STERNER, H., JUNG, R., SCHULTE, B., Testing of techniques for the conditioning of fuel elements in view of direct disposal *[Deutsche Ges. Wiederaufarbeitung Kernbrennstoffen mbH, Hannover, Germany; Ges. Nukl. Serv. mbH, Hannover, Germany; Ruterbau, Langenhagen, Germany]*

Vol. 137 No. 1 (1992) 147-151
WIESE, H., DEMONIE, M., Operation of the Pamela high-level waste vitrification facility *[Belgoproc NV, Dessel, Belgium; Deutsche Ges. Wiederaufarbeitung Kernbrennstoffen mbH, Hannover, Germany]*

Vol. 137 No. 1 (1992) 153-158
BIURRUN, E., LEMPERT, J.P., ENGELMANN, H.-J., System-analysis dual-purpose repository – New results of temperature calculations *[Deutsche Ges. Bau & Betrieb Endlagern Abfallstoffe mbH, Peine, Germany]*

Vol. 137 No. 2 (1992) 163-170
NICHOLS, E., WILDAVSKY, A., Learning and nuclear safety: New reactors and united-states regulation *[Univ. Calif. Berkeley, Berkeley, CA, USA]*

Vol. 137 No. 2 (1992) 171-180
KASTEN, P.R., The safety of Modular High Temperature Gas Cooled Reactors *[Univ. Tennessee, Knoxville, TN, USA]*

Vol. 137 No. 2 (1992) 181-189
GYOREY, G.L., HARDY, R.W., MAGEE, P.M., Safety and licensing of the PRISM Liquid Metal Cooled Reactor *[GE, San Jose, CA, USA]*

Vol. 137 No. 2 (1992) 191-198
SNELL, V.G., TAKÁTS, F., SZIVÓS, K., The SLOWPOKE licensing model *[Atom Energy Canada Ltd. Res., Chalk River Nucl. Labs, Chalk River, Ontario, Canada; Erőterv, Power Stn. & Network Engn. Co., Budapest, Hungary]*

Vol. 137 No. 2 (1992) 199-205
BARTHELS, H., REHM, W., JAHN, W., Theoretical and experimental investigations into the safety behaviour of small HTRs under natural convection conditions *[KFA Jülich GmbH, Jülich, Germany]*

Vol. 137 No. 2 (1992) 207-211
BOLIN, J.M., DUNN, T.D., VERFONDERN, K., KANIA, M.J., Modeling of fission product release from HTR fuel for risk analyses *[Gen. Atom Co., San Diego, CA, USA; KFA Jülich GmbH, Jülich, Germany; Martin Marietta Energy Syst. Inc., Oak Ridge, TN, USA]*

Vol. 137 No. 2 (1992) 213-219
KUGELER, K., EPPING, C., SCHMIDTLEIN, P., SCHREINER, P., Aerosol formation by graphite corrosion in case of water and air ingress to the core of a High-Temperature Reactor *[Univ. Duisburg, Duisburg, Germany]*

Vol. 137 No. 2 (1992) 221-227
BARTHELS, H., VON DER DECKEN, C.-B., INIOTAKIS, N., The influence of the chemical state of the fission products on the filter properties of the graphite components *[KFA Jülich GmbH, Jülich, Germany]*

Vol. 137 No. 2 (1992) 229-247
KELLY, D.L., PAFFORD, D.J., SCHROEDER, J.A., JONES, K.R., Simplified methodology for assessing the risk impact of potential performance improvements for the dry pressurized water reactor containment *[EG&G Idaho Inc., Idaho Natl. Engn. Lab., Idaho Falls, ID, USA]*

Vol. 137 No. 2 (1992) 249-257
KENDOUSH, A.A., A comparative study of the various nuclear radiations used for void fraction measurements *[Iraqi Atom Energy Commiss., Baghdad, Iraq]*

Vol. 137 No. 2 (1992) 259-266
IOKA, I., KAJI, Y., MIYAMOTO, Y., NISHIGUCHI, I., Creep collapse of a heat transfer tube subjected to external pressure at high temperatures *[Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan; Kanagawa Inst. Technol., Atsugi, Kanagawa, Japan; Sci. & Technol. Agcy., Tokyo, Japan]*

Vol. 137 No. 2 (1992) 267-274
WANG, H., KONDO, S., Analysis on the mathematical structure of the nonlinear BWR model *[Univ. Tokyo, Tokyo, Japan]*

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MAYER, K.H., BERGER, C., HEINRICH, D., SCARLIN, B., Evaluation by fracture mechanics of ultrasonic indications in turbine and generator rotors *[ABB Power Generat. Ltd., Baden*

Baden, Germany; Maschinenfabrik Augsburg Nürnberg Energie GmbH, Nürnberg, Germany; Siemens AG, KWU, Mülheim, Germany]

Vol. 137 No. 3 (1992) 291-304
HÄNNINEN, H., AALTONEN, P., RINTAMAA, R., ARILAHTI, E., EHRNSTÉN, U., Static and cyclic crack growth of low alloy steels in high-oxygen water simulating HDR test conditions *[Tech. Res. Ctr. Finland, Espoo, Finland]*

Vol. 137 No. 3 (1992) 305-314
SMITH, E., GRIESBACH, T.J., Predicting crack arrest in reactor pressure vessels *[Elect. Power Res. Inst., Palo Alto, CA, USA; Univ. Manchester, Manchester, Lancs, England]*

Vol. 137 No. 3 (1992) 315-321
STROPPE, H., CLOS, R., SCHREPPEL, U., Determination of the dynamic fracture toughness using a new stress pulse loading method *[Tech. Univ. Otto von Guericke, Magdeburg, Germany]*

Vol. 137 No. 3 (1992) 323-334
MISHIMA, Y., KAWAKAMI, T., SATOH, M., URABE, Y., SANO, J., FUKUDA, T., KUSUHASHI, M., SATO, I., SUZUKI, K., Manufacture and characteristics of a heavy section steel test plate with changing mechanical properties in the through-thickness direction *[Japan Power Engn. & Inspect. Corp., Tokyo, Japan; Japan Steel Works Ltd., Muroran, Japan; Mitsubishi Heavy Ind. Co. Ltd., Kobe, Hyogo, Japan; Mitsubishi Heavy Ind. Co. Ltd., Takasago, Hyogo, Japan; Univ. Tokyo, Tokyo, Japan]*

Vol. 137 No. 3 (1992) 335-341
DAHL, W., KALWA, C., Investigations on strength and ductility of base metals and welded joints of steels for power plants at elevated temperatures *[Rhein Westfal TH Aachen, Aachen, Germany]*

Vol. 137 No. 3 (1992) 343-353
HAGEDORN, K.E., ECKEL, M., Investigations in fracture mechanics failure concepts with thermomechanically rolled steels *[Max Planck Inst. Iron Res., Düsseldorf, Germany]*

Vol. 137 No. 3 (1992) 355-362
PENKALLA, H.J., SCHUBERT, F., NICKEL, H., Material hardening under multiaxial creep loading *[KFA Jülich GmbH, Jülich, Germany]*

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DOBMANN, G., SEIBOLD, A., First attempts towards the early detection of fatigued substructures using cyclic-loaded 20 MnMoNi 5-5 steel *[Fraunhofer Inst. Zerstörungsfreie Prüfverfahren, Saarbrücken, Germany; Siemens AG, KWU, Erlangen, Germany]*

Vol. 137 No. 3 (1992) 371-378
SCHÄFER, L., WASSILEW, C., Assessment of the residual time to rupture of fuel pins after reactor core disturbances using the Lebensanteil rule *[KFZ Karlsruhe GmbH, Karlsruhe, Germany]*

Vol. 137 No. 3 (1992) 379-385
ZDÁREK, J., PECÍNKA, L., BRUMOVSKY, M., Long-term integrity of main pressure boundary components in the first generation of NPPs in Czechoslovakia *[Nucl. Res. Inst., Rez, Czech Republic; Skoda Co., Pizen, Czech Republic]*

Vol. 137 No. 3 (1992) 387-404
WOLF, L., HÄFNER, W., GEISS, M., HANSJOSTEN, E., KATZENMEIER, G., Results of HDR-experiments for pipe loads under thermally stratified flow conditions *[Battelle Inst. eV, Frankfurt, Germany; KFZ Karlsruhe GmbH, Karlsruhe, Germany]*

Vol. 137 No. 3 (1992) 405-417
STADTMÜLLER, W., EISELE, U., JULISCH, P., STURM, D., The load bearing capacity of large pipes containing part-circumferential flaws under tensile loading. A comparison of experiments and analytical approximation methods *[Univ. Stuttgart, Staatliche Materialprüfungsanstalt, Stuttgart, Germany]*

Vol. 137 No. 3 (1992) 419-432
STOPPLER, W., STURM, D., HIPPELEIN, K., DE BOER, A., KERKHOF, K., SOMMER, H., Crack growth tests on pipes with circumferential defects under internal pressure and superposed alternating bending load *[Univ. Stuttgart, Staatliche Materialprüfungsanstalt, Stuttgart, Germany]*

Vol. 137 No. 3 (1992) 433-436
AHLSTRAND, R., VALO, M., Experience of irradiation embrittlement in the Loviisa reactor pressure vessels *[Imatra Power Co., Vantaa, Finland; Tech. Res. Ctr. Finland, Espoo, Finland]*

Vol. 137 No. 3 (1992) 437-448
SIMPSON, L.A., COLEMAN, C.E., Mitigation of degradation mechanisms affecting CANDU pressure tubes *[Atom Energy Canada Ltd. Res., Chalk River Nucl. Labs, Chalk River, Ontario, Canada; Atom Energy Canada Ltd. Res., Whiteshell Labs, Pinawa, Manitoba, Canada]*

Vol. 137 No. 3 (1992) 449-455
CHARALAMBUS, B., Fatigue analysis for analytically overloaded piping components and valves in nuclear power plants *[Siemens AG, KWU, Erlangen, Germany]*

Vol. 137 No. 3 (1992) 457-465
OKAMURA, H., YAGAWA, G., KAWAKAMI, T., URABE, Y., SATO, M., SANO, J., Ductile crack growth under a PTS event *[Japan Power Engn. & Inspect. Corp., Tokyo, Japan; Mitsubishi Heavy Ind. Co. Ltd., Takasago, Hyogo, Japan; Univ. Tokyo, Tokyo, Japan]*

Vol. 138 No. 1 (1992) 1-10
LIU, W.K., HU, Y.K., BELYTSCHKO, T., ALE finite elements with hydrodynamic lubrication for metal forming *[Northwestern Univ., Evanston, IL, USA]*

Vol. 138 No. 1 (1992) 11-22
WHIRLEY, R.G., ENGELMANN, B.E., Recent developments in DYNA3D for impact problems *[Lawrence Livermore Natl. Lab., Methods Dev. Grp., Livermore, CA, USA]*

Vol. 138 No. 1 (1992) 23-35
ENGELMANN, B.E., WHIRLEY, R.G., Recent developments in NIKE2D for metalforming analysis and low rate impact *[Lawrence Livermore Natl. Lab., Methods Dev. Grp., Livermore, CA, USA]*

Vol. 138 No. 1 (1992) 37-43
ISHIKAWA, N., HOSHIKAWA, T., KATSUKI, S., IIDA, T., Dynamic response of steel pipe arch under impact loading *[Natl. Def. Acad., Yokosuka, Kanagawa, Japan; Sumitomo Met. Ind. Co., Tokyo, Japan]*

Vol. 138 No. 1 (1992) 45-52
OHNO, T., UCHIDA, T., MATSUMOTO, N., TAKAHASHI, Y., Local damage of reinforced concrete slabs by impact of deformable projectiles *[Natl. Def. Acad., Yokosuka, Kanagawa, Japan]*

Vol. 138 No. 1 (1992) 53-64
TORIGAKI, T., KIKUCHI, N., Appropriate remeshing for finite element impact analysis with consideration of error and computing efficiency *[Nissan Motor Co. Ltd., Nissan Res. Ctr., Yokosuka, Kanagawa, Japan; Univ. Michigan, Ann Arbor, MI, USA]*

Vol. 138 No. 1 (1992) 65-74
NILSSON, L., ZHONG, Z.H., High performance algorithms for the solution of general contact-impact problems *[Linköping Univ., Linköping, Sweden]*

Vol. 138 No. 1 (1992) 75-91
JOHNSON, G.R., SCHONHARDT, J.A., Some parametric sensitivity analyses for high velocity impact computations *[Alliant Techsyst Inc., Brooklyn Center, MN, USA]*

Vol. 138 No. 1 (1992) 93-104
ANDERSON, C.E. (JR.), WALKER, J.D., HAUVER, G.E., Target resistance for long-rod penetration into semi-infinite targets *[Southwestern Res. Inst., San Antonio, TX, USA; USA, Ballist Res. Lab., Aberdeen Proving Ground, MD, USA]*

Vol. 138 No. 1 (1992) 105-110
KUSANO, N., AOYAGI, T., AIZAWA, J., UENO, H., MORIKAWA, H., KOBAYASHI, N., Impulsive local damage analyses of concrete structures by the distinct element method *[Kajima Corp., Tokyo, Japan; Univ. Tokyo, Tokyo, Japan]*

Vol. 138 No. 1 (1992) 111-116
UEDA, M., SHIRAI, T., DOI, Y., OTAKI, M., SAITO, H., Application of an impact analysis code to reinforced concrete structures *[Mitsubishi Res. Inst. Inc., Tokyo, Japan; Takenaka Corp., Tokyo, Japan]*

Vol. 138 No. 1 (1992) 117-122
ITOH, M., KATAYAMA, M., OBATA, H., MORIYA, K., MURAKAMI, S., Introduction of coupled thermomechanical equations into a hydrocode *[CRC Res. Inst. Inc., Abiko, Chiba, Japan; Nagoya Univ., Nagoya, Aichi, Japan]*

Vol. 138 No. 2 (1992) 127-133
PIHLAJAVAARA, S.E., Estimation of the service life of concrete under different conditions with special reference to radioactive waste repositories *[Tech. Res. Ctr. Finland, Espoo, Finland]*

Vol. 138 No. 2 (1992) 135-142
SAITO, H., HASEGAWA, H., NAKANE, S., Alteration behavior of 67 years old tunnel lining concrete *[Obayashi Corp., Tokyo, Japan]*

Vol. 138 No. 2 (1992) 143-150
FUJIWARA, Y., MARUYA, T., OWAKI, E., Degradation of concrete buried in soil with saline ground water *[Taisei Corp., Yokohama, Kanagawa, Japan]*

Vol. 138 No. 2 (1992) 151-155
SAITO, H., NAKANE, S., IKARI, S., FUJIWARA, A., Preliminary experimental study on the deterioration of cementitious materials by an acceleration method *[Obayashi Corp., Tokyo, Japan; Radioact. Waste Management Ctr., Tokyo, Japan]*

Vol. 138 No. 2 (1992) 157-164
JACOBS, F., WITTMANN, F.H., Long term behavior of concrete in nuclear waste repositories *[Swiss Fed. Inst. Technol., Zurich, Switzerland]*

Vol. 138 No. 2 (1992) 165-170
IRIYA, K., ITOH, Y., HOSODA, M., FUJIWARA, A., TSUJI, Y., Experimental study on the water permeability of a reinforced concrete silo for radioactive waste repository *[Gunma Univ., Kiryu, Gunma, Japan; Kumagai Gumi Corp., Tokyo, Japan; Obayashi Corp., Tokyo, Japan; Radioact. Waste Management Ctr., Tokyo, Japan; Shimizu Corp., Tokyo, Japan]*

Vol. 138 No. 2 (1992) 171-177
MAYER, G., JACOBS, F., WITTMANN, F.H., Experimental determination and numerical simulation of the permeability of cementitious materials *[Swiss Fed. Inst. Technol., Zurich, Switzerland]*

Vol. 138 No. 2 (1992) 179-188
MAKI, Y., OHNUMA, H., Application of concrete to the treatment and disposal of radioactive waste in Japan *[Cent. Res. Inst. Elect. Power Ind., Tokyo, Japan; Hosei Univ., Tokyo, Japan]*

Vol. 138 No. 2 (1992) 189-201
SASAKI, N., YUI, M., HARA, K., ISHIKAWA, H., TSUBOYA, T., Studies on material properties and structural mechanics of engineered barriers for HLW geological isolation *[Power Reactor & Nucl. Fuel Dev. Corp., Tokai, Ibaraki, Japan]*

Vol. 138 No. 2 (1992) 203-215
PRIJ, J., HAMILTON, L.F.M., Thermo-mechanical analyses of the HAW testfield *[Netherlands Energy Res. Fdn., Petten, Netherlands]*

Vol. 138 No. 2 (1992) 217-224
KINOSHITA, N., ISHII, T., KURODA, H., TADA, H., Prediction of permeability changes in an excavation response zone *[Shimizu Corp., Tokyo, Japan]*

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KOBAYASHI, A., HARADA, Y., A method for examining ground water flow and solute transport around a repository *[Hazama Corp., Tsukuba, Ibaraki, Japan; Radioact. Waste Management Ctr., Tokyo, Japan]*

Vol. 138 No. 3 (1992) 239-249
YAMAUCHI, K., KIMURA, S., KATORI, T., SIGEHIRO, K., SHINDO, T., Analysis of stress corrosion cracking life based on reaction model *[Babcock Hitachi Co. Ltd., Kure, Hiroshima, Japan]*

Vol. 138 No. 3 (1992) 251-258
KANNO, S., HASEGAWA, K., SHIMIZU, T., SAITOH, T., GOTOH, N., Analysis of leak and break behavior in a failure assessment diagram for carbon steel pipes *[Hitachi Ltd., Hitachi, Ibaraki, Japan]*

Vol. 138 No. 3 (1992) 259-268
HASHIMOTO, Y., URABE, Y., MASAMORI, S., KAMIWAKI, Y., BABA, K., Procedure of crack shape determination by Reversing DC Potential Method *[Kobe Shipyard & Machinery Works, Kobe, Hyogo, Japan; Mitsubishi Heavy Ind. Co. Ltd., Takasago, Hyogo, Japan; Syst. Engn. Dept., Kobe, Hyogo, Japan]*

Vol. 138 No. 3 (1992) 269-282
IMAZU, A., IWATA, K., WADA, Y., NAGATA, T., Recent achievements at PNC in the development of high temperature structural design methods for FBR components *[Power Reactor & Nucl. Fuel Dev. Corp., Oarai, Ibaraki, Japan]*

Vol. 138 No. 3 (1992) 283-296
SHIMAKAWA, T., TAKE, K., UNO, M., TAKAMATSU, S., TAKAHASHI, Y., MIURA, N., Development of the evaluation method for crack propagation due to thermal striping *[Cent. Res. Inst. Elect. Power Ind., Tokyo, Japan; Kawasaki Heavy Ind. Co. Ltd., Tokyo, Japan]*

Vol. 138 No. 3 (1992) 297-312
IIDA, K., A review of fatigue failures in LWR plants in Japan *[Shibaura Inst. Technol., Tokyo, Japan; Univ. Tokyo, Tokyo, Japan]*

Vol. 138 No. 3 (1992) 313-337
LEE, M., LEE, G.D., Quantification of severe accidents source terms of BWR 4 reactor with Mark I containment using source term code package *[Natl. Tsing Hua Univ., Hsinchu, Taiwan; Taiwan Power Co., Taipei, Taiwan]*

Vol. 138 No. 3 (1992) 339-356
FUKUTOMI, S., YOSHIMURA, S., ITOH, J., Experimental evaluation of an operator decision aid system for BWR power plants *[Toshiba Co. Ltd., Kawasaki, Kanagawa, Japan]*

Vol. 138 No. 3 (1992) 357-373
HO, V., APOSTOLAKIS, G., COMPBRN IIIe – a computer code for probabilistic fire risk analysis *[Univ. Calif. Los Angeles, Los Angeles, CA, USA]*

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ABDUL-RAZZAK, A., SHOUKRI, M., CHAN, A.M.C., Rewetting of hot horizontal tubes *[McMaster Univ., Hamilton, Ontario, Canada]*

Vol. 138 No. 3 (1992) 389-401
EBADIAN, M.A., YANG, G., BIGZADEH, E., WALKER, J.F., ABRAHAM, T.J., Analysis of heat and mass transfer to determine heat loss and the rate of condensation of the MVSTs off-gas ducts *[Florida Int. Univ., Miami, FL, USA; Oak Ridge Natl. Lab., Oak Ridge, TN, USA]*

Vol. 138 No. 3 (1992) 403-408
WALKER, S.P., YU, A., FENNER, R.T., Pellet-clad mechanical interaction: pellet-clad bond failure and strain relief *[Univ. London, Imperial Coll. Sci. Technol. & Med., London, England]*

Vol. 139 No. 1 (1993) 1-15
ZHANG, Q., HEWITT, G.F., LESLIE, D.C., Nuclear safety code modelling of condensation in stratified flow *[Univ. London, Imperial Coll. Sci. Technol. & Med., London, England]*

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LEE, C.C., JONES, O.C., BECKER, M., Thermofluid-neutronic stability of the rotating, fluidized-bed, space power reactor *[Rensselaer Polytech. Inst., Troy, NY, USA]*

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HENRY, R.E., FAUSKE, H.K., External cooling of a reactor vessel under severe accident conditions *[Fauske & Assoc. Inc., Burr Ridge, IL, USA]*

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HALEY, T.C., LAHEY, R.T. (JR.), DREW, D.A., A characteristic analysis of void waves using two-fluid models *[Rensselaer Polytech. Inst., Troy, NY, USA]*

Vol. 139 No. 1 (1993) 59-81
HEJZLAR, P., TODREAS, N.E., DRISCOLL, M., Passive decay heat removal in advanced LWR concepts *[MIT, Cambridge, MA, USA]*

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KIM, J.H., ROIDT, R.M., DEARDORFF, A.F., Thermal stratification and reactor piping integrity *[Elect. Power Res. Inst., Palo Alto, CA, USA; Struct. Integr. Assoc. Inc., San Jose, CA, USA; Westinghouse Elect. Corp., Pittsburgh, PA, USA]*

Vol. 139 No. 1 (1993) 97-103
COKMEZ-TUZLA, A.F., TUZLA, K., CHEN, J.C., Experimental assessment of liquid-wall contacts in post-CHF convective boiling *[Lehigh Univ., Bethlehem, PA, USA]*

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CATTON, I., MARN, J., Some models for the prediction of fluid elastic instability *[Univ. Calif. Los Angeles, Los Angeles, CA, USA]*

Vol. 139 No. 1 (1993) 121-126
CHEXAL, B., KALRA, S. PAL, HOROWITZ, J.S., HEALZER, J.M., Boiling water reactor fuel heatup during a loss of coolant while refueling *[Dupage Comp. Applicat., Woodridge, IL, USA; Elect. Power Res. Inst., Palo Alto, CA, USA; S. Levy Inc., Campbell, CA, USA]*

Vol. 139 No. 1 (1993) 127-140
SCHROCK, V.E., PETERSON, P.F., BAI, R.Y., A gas dynamic choking phenomenon in early time intense transient condensation *[Univ. Calif. Berkeley, Berkeley, CA, USA]*

Vol. 139 No. 1 (1993) 141-147
SHOTKIN, L.M., BESSETTE, D., The USNRC thermal-hydraulic research program *[US Nucl. Regulatory Commiss., Washington, DC, USA]*

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LEE, S.C., BANKOFF, S.G., Prediction of the onset of flow instability in transient subcooled flow boiling *[Northwestern Univ., Evanston, IL, USA]*

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TSAI, C.S., Innovative design of viscoelastic dampers for seismic mitigation *[SUNY Buffalo, Buffalo, NY, USA]*

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ETTEMEYER, A., New techniques for nondestructive testing of piping systems in nuclear power plants *[Ettemeyer Qualitatssicherung, Neu Ulm, Germany]*

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BOVALINI, R., D'AURIA, F., Scaling of the accuracy of the RELAP5/MOD2 code *[Univ. Pisa, Pisa, Italy]*

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HWANG, D.-H., BAEK, W.-P., CHANG, S.H., Development of a bundle correction method and its application to predicting CHF in rod bundles *[Korea Adv. Inst. Sci. & Technol., Taejon, South Korea; Korea Atom Energy Res. Inst., Taejon, South Korea]*

Vol. 139 No. 2 (1993) 221-233
LIEM, P.H., SEKIMOTO, H., Neutronic and thermal hydraulic design of the graphite moderated helium-cooled high flux reactor *[Tokyo Inst. Technol., Tokyo, Japan]*

Vol. 139 No. 2 (1993) 235-243
NIGMATULIN, B.I., MELIKHOV, O.I., BLINKOV, V.N., GAKAL, P.G., The numerical analysis of boiling flow instability in parallel heated channels *[Kharkov Aviat. Inst., Kharkov, Ukraine; Res. & Engn. Ctr. LWR Nucl. Plants Safety, Elektrogorsk, Russia]*

Vol. 139 No. 2 (1993) 245-251
KABANOV, L., JANKOWSKI, M., MAUERSBERGER, H., The IAEA Accident Management Programme *[Int. Atom Energy Agcy., Vienna, Austria]*

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WADA, H., KAGUCHI, H., UETA, M., ICHIMIYA, M., KIMURA, K., FUKUDA, Y., SUZUKI, M., Proposal of a new estimation method for the thermal ratchetting of a cylinder subjected to a moving temperature distribution *[Hitachi Ltd., Tokyo, Japan; Japan Atom Power Co. Inc., Tokyo, Japan; Mitsubishi Heavy Ind. Co. Ltd., Kobe, Hyogo, Japan; Power Reactor & Nucl. Fuel Dev. Corp., Tokyo, Japan; Toshiba Co. Ltd., Kawasaki, Kanagawa, Japan]*

Vol. 139 No. 3 (1993) 269-275
ASADA, Y., DOZAKI, K., UETA, M., ICHIMIYA, M., MORI, K., TAGUCHI, K., KITAGAWA, M., NISHIDA, T., SAKON, T., SUKEKAWA, M., Exploratory research on creep and fatigue properties of 9Cr-steels for the steam generator of an FBR *[Hitachi Ltd., Hitachi, Ibaraki, Japan; Ishikawajima Harima Heavy Ind. Co. Ltd., Tokyo, Japan; Japan Atom Power Co. Inc., Tokyo, Japan; Mitsubishi Heavy Ind. Co. Ltd., Takasago, Hyogo, Japan; Power Reactor & Nucl. Fuel Dev. Corp., Oarai, Ibaraki,*

Japan; Toshiba Co. Ltd., Yokohama, Kanagawa, Japan; Univ. Tokyo, Tokyo, Japan]

Vol. 139 No. 3 (1993) 277-281
HAMADA, K., TOKUNO, K., TAKEDA, T., Dispersion hardening effects of Nb-V precipitates in MOD.9Cr-1Mo steels *[Nippon Steel Corp. Ltd., Futtsu, Chiba, Japan]*

Vol. 139 No. 3 (1993) 283-292
SHIMAKAWA, T., TAKAHASHI, H., DOI, H., WATASHI, K., ASADA, Y., Creep-fatigue crack propagation tests and the development of an analytical evaluation method for surface cracked pipe *[Hitachi Ltd., Tsuchiura, Ibaraki, Japan; Kawasaki Heavy Ind. Co. Ltd., Tokyo, Japan; Power Reactor & Nucl. Fuel Dev. Corp., Oarai, Ibaraki, Japan; Toshiba Co. Ltd., Kawasaki, Kanagawa, Japan; Univ. Tokyo, Tokyo, Japan]*

Vol. 139 No. 3 (1993) 293-298
NONAKA, I., KITAGAWA, M., KANEKO, H., SATO, T., YAMASHITA, M., WATASHI, K., ASADA, Y., Creep-fatigue crack propagation behavior in a surface cracked plate *[Ishikawajima Harima Heavy Ind. Co. Ltd., Tokyo, Japan; Univ. Tokyo, Tokyo, Japan]*

Vol. 139 No. 3 (1993) 299-309
ASAYAMA, T., AOTO, K., WADA, Y., Effect of nonproportional loading on creep-fatigue properties of 304 stainless steel at low strain ranges near the elastic region *[Power Reactor & Nucl. Fuel Dev. Corp., Oarai, Ibaraki, Japan]*

Vol. 139 No. 3 (1993) 311-317
SAKURAI, T., SUGAI, S., AOKI, M., Life assessment of high-temperature components of thermal power plants in Japan *[Tokyo Elect. Power Co. Ltd., Tokyo, Japan]*

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IWATA, K., A two-surface cyclic plasticity model consistent with fundamental stress-strain equations of the power-law type *[Power Reactor & Nucl. Fuel Dev. Corp., Oarai, Ibaraki, Japan]*

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TAGUCHI, K., UNO, T., Determination of internal state variables and constitutive modeling for Type 316 stainless steel *[Toshiba Co. Ltd., Yokohama, Kanagawa, Japan]*

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NAKAMURA, T., ASADA, Y., Extensive modeling of high temperature deformation for cyclically softening material *[Univ. Tokyo, Tokyo, Japan]*

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KURODA, T., EBINE, T., SATO, S., KATO, M., Recent advances in concrete containment vessels in Japan *[Japan Atom Power Co. Inc., Tokyo, Japan; Minist. Int. Trade & Ind., Tokyo, Japan; Shimizu Corp., Tokyo, Japan; Tokyo Elect. Power Co. Ltd., Tokyo, Japan]*

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GOU, P.F., TOWNSEND, H.E., SAWHNEY, P.S., MANDAGI, K., DUCHON, N.B., Containments design for the Advanced and Simplified Boiling Water Reactor standard plants *[Bechtel Power Corp., San Francisco, CA, USA; GE, San Jose, CA, USA]*

Vol. 140 No. 1 (1993) 27-31
ALTES, J., Containment concepts for High Temperature Reactors *[KFA Jülich GmbH, Jülich, Germany]*

Vol. 140 No. 1 (1993) 33-37
HE, S.Y., DONG, D., Containment for the Low Temperature District Nuclear-Heating Reactor *[Tsing Hua Univ., Beijing, P.R. China]*

Vol. 140 No. 1 (1993) 39-48
KRIEG, R., Can the acceptance of nuclear reactors be raised by a simpler, more transparent safety concept employing improved containments? *[KFZ Karlsruhe GmbH, Karlsruhe, Germany]*

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VALENCIA, L.A., Hydrogen distribution tests under severe accident conditions at the Large-Scale HDR-facility *[KFZ Karlsruhe GmbH, Karlsruhe, Germany]*

Vol. 140 No. 1 (1993) 61-68
SMITH, P.N., ELLICOTT, P., A UK analysis of light gas distribution experiment E11.2 in the HDR facility *[UKAEA Technol., Winfrith Technol. Ctr., Dorchester, Dorset, England]*

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COE, I.M., UTTON, D.B., The use of the COMPACT code for calculation of long term environmental effects as a result of high temperature discharges into confined areas *[Natl. Nucl. Corp. Ltd., Knutsford, Cheshire, England]*

Vol. 140 No. 1 (1993) 81-94
TIESZEN, S.R., Effect of initial conditions on combustion generated loads *[Sandia Natl. Labs, Albuquerque, NM, USA]*

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BREITUNG, W., Conservative estimates for dynamic containment loads from hydrogen combustions *[KFZ Karlsruhe GmbH, Karlsruhe, Germany]*

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ZHANG, Z.Y., YANG, X.J., Study on the structural analysis of the containment and the hydrogen detonation problem under severe accident conditions *[China Inst. Atom Energy, Beijing, P.R. China]*

Vol. 140 No. 1 (1993) 119-126
MARESCA, G., MILELLA, P.P., PINO, G., Structural response of a nuclear power plant steel containment under H_2 detonation *[Ente Nazl. Energia Atom, Rome, Italy]*

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SUMI, N., ITO, Y., The propagation and reflection of thermal stress waves in anisotropic nonhomogeneous hollow cylinders and spheres *[Shizuoka Univ., Shizuoka, Japan]*

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STEPAN, H., AMON, G., Functional tests of French safety valves, type SEBIM, for their fitness for use of the primary system of German pressurized water reactors *[Tech. Überwachungsverein Bayern eV, Munich, Germany]*

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SHEN, W.Q., JONES, N., Uniaxial true stress-true strain curve for a ductile metal *[Univ. Liverpool, Liverpool, Merseyside, England]*

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SINAI, Y.L., FORD, I.J., BARRETT, J.C., CLEMENT, C.F., Prediction of coupled heat and mass transfer in the Fast Reactor cover gas: the C-GAS code *[Natl. Nucl. Corp. Ltd., Warrington, Cheshire, England]*

Vol. 140 No. 2 (1993) 193-209
BÜRGER, M., UNFRIED, J., BUCK, M., KULENOVIC, R., RÖSLER, S., GROLL, M., SCHATZ, A., Experimental examinations of the 2D-thermal-hydraulic code FRECON for single phase natural convection flows in complex structures *[Univ. Stuttgart, Stuttgart, Germany]*

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UNAL, C., HAYTCHER, E., NELSON, R., A phenomenological model of the thermal hydraulics of convective boiling during the quenching of hot rod bundles. Part III: Model assessment using Winfrith steady-state, post-CHF, void-fraction and heat-transfer measurements and Berkeley transient-reflood test data *[Los Alamos Natl. Lab., Los Alamos, NM, USA]*

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LEWIS, R.W., ZHENG, Y., GETHIN, D.T., An adaptive finite element model for the behaviour of uranium hexafluoride filled container in a fire *[Univ. Coll. Swansea, Swansea, West Glam, Wales]*

Vol. 140 No. 2 (1993) 251-260
SU'UD, Z., SEKIMOTO, H., Preliminary design study of the ultra long life fast reactor *[Tokyo Inst. Technol., Tokyo, Japan]*

Vol. 140 No. 2 (1993) 261-267
SCHULTEN, R., The HTR with SiC-technology *[KFA Jülich GmbH, Jülich, Germany]*

Vol. 140 No. 2 (1993) 269-284
MACGRATH, D., YANG, G., EBADIAN, M.A., The effects of chemical concentration on liquid waste evaporation from the Melton Valley Storage Tanks (MVSTs) system *[Florida Int. Univ., Miami, FL, USA]*

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VELIKOVSKY, A., Safety of Ukraine's NPPs *[No address]*

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AMANO, K., IWANO, R., SIBATA, Y., Three-dimensional analysis method for sloshing behavior and its application to FBRs *[Hitachi Ltd., Hitachi, Ibaraki, Japan]*

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MORISHITA, M., IWATA, K., Seismic behavior of a free-standing core in a large LMFBR *[Power Reactor & Nucl. Fuel Dev. Corp., Oarai, Ibaraki, Japan]*

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AKIYAMA, H., OHTSUBO, H., NAKAMURA, H., MATSUURA, S., HAGIWARA, Y., YUHARA, T., HIRAYAMA, H., KOKUBO, K., OOKA, Y., Outline of the seismic buckling design guideline of an FBR - a tentative draft *[Elect. Power Ind., Tokyo, Japan; Hitachi Ltd., Tokyo, Japan; Kawasaki Heavy Ind. Co. Ltd., Tokyo, Japan; Mitsubishi Heavy Ind. Co. Ltd., Tokyo, Japan; Toshiba Co. Ltd., Kawasaki, Kanagawa, Japan; Univ. Tokyo, Tokyo, Japan]*

Vol. 140 No. 3 (1993) 331-340
TAKEDA, H., KOGA, T., WATANABE, O., Experimental and computational simulation for natural circulation in an LMFBR *[Cent. Res. Inst. Elect. Power Ind., Abiko, Chiba, Japan; Mitsubishi Atom Power Ind. Inc., Tokyo, Japan]*

Vol. 140 No. 3 (1993) 341-348
IGARI, T., KITADE, S., UETA, M., ICHIMIYA, M., KIMURA, K., SATOH, Y., TAKE, K., Advanced evaluation of thermal ratchetting of FBR components *[Hitachi Ltd., Hitachi, Ibaraki, Japan; Japan Atom Power Co. Inc., Tokyo, Japan; Kawasaki Heavy Ind. Co. Ltd., Akashi, Japan; Mitsubishi Heavy Ind. Co. Ltd., Nagasaki, Japan; Power Reactor & Nucl. Fuel Dev. Corp., Oarai, Ibaraki, Japan; Toshiba Co. Ltd., Yokohama, Kanagawa, Japan]*

Vol. 140 No. 3 (1993) 349-372
TANAKA, N., WATASHI, K., UMEDA, H., KIKUCHI, M., IWATA, K., Creep-fatigue failure test and analysis of a vessel-type structure subjected to cyclic thermal transients *[Power Reactor & Nucl. Fuel Dev. Corp., Oarai, Ibaraki, Japan]*

Vol. 140 No. 3 (1993) 373-385
SUGANO, T., TSUBOTA, H., KASAI, Y., KOSHIKA, N., ORUI, S., VON RIESEMANN, W.A., BICKEL, D.C., PARKS, M.B., Full-scale aircraft impact test for evaluation of impact force *[Kobori Res. Complex Inc., Tokyo, Japan; Sandia Natl. Labs, Albuquerque, NM, USA]*

Vol. 140 No. 3 (1993) 387-405
SUGANO, T., TSUBOTA, H., KASAI, Y., KOSHIKA, N., OHNUMA, H., VON RIESEMANN, W.A., BICKEL, D.C., PARKS, M.B., Local damage to reinforced concrete structures caused by impact of aircraft engine missiles. Part 1. Test program, method and results *[Cent. Res. Inst. Elect. Power Ind., Abiko, Chiba, Japan; Kobori Res. Complex Inc., Tokyo, Japan; Sandia Natl. Labs, Albuquerque, NM, USA]*

Vol. 140 No. 3 (1993) 407-423
SUGANO, T., TSUBOTA, H., KASAI, Y., KOSHIKA, N., ITOH, C., SHIRAI, K., VON RIESEMANN, W.A., BICKEL, D.C., PARKS, M.B., Local damage to reinforced concrete structures caused by impact of aircraft engine missiles. Part 2. Evaluation of test-results *[Cent. Res. Inst. Elect. Power Ind., Abiko, Chiba, Japan; Kobori Res. Complex Inc., Tokyo, Japan]*

Vol. 141 No. 1-2 (1993) 3-15
SATO, Y., SADATOMI, M., KAWAHARA, A., Measurement of turbulent diffusivity of both gas and liquid phases in quasi-2D two-phase flow *[Kumamoto Univ., Kumamoto, Japan]*

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OHBA, K., NAGAE, K., Characteristics and behavior of the interfacial wave on the liquid film in a vertically upward air-water two-phase annular flow *[Kansai Univ., Osaka, Japan]*

Vol. 141 No. 1-2 (1993) 27-34
SHIOMI, Y., KUTSUNA, H., AKAGAWA, K., OZAWA, M., Two-phase flow in an annulus with a rotating inner cylinder (flow pattern in bubbly flow region) *[Kansai Univ., Osaka, Japan; Ryukoku Univ., Fac. Sci. & Technol., Otsu, Japan]*

Vol. 141 No. 1-2 (1993) 35-46
TODA, S., HORI, Y., Characteristics of two-phase condensing flow by visualization using computed image processing *[Tohoku Univ., Sendai, Miyagi, Japan]*

Vol. 141 No. 1-2 (1993) 47-58
TODA, S., KATSUMURA, Y., HASHIZUME, H., OKUYAMA, M., Heat transfer between fluid with free surface and melted solid wall *[Tohoku Univ., Sendai, Miyagi, Japan]*

Vol. 141 No. 1-2 (1993) 59-68
FUKANO, T., KARIYASAKI, A., Characteristics of gas-liquid two-phase flow in a capillary tube *[Fukuoka Univ., Fac. Engn., Fukuoka, Japan; Kyushu Univ., Fac. Engn., Fukuoka, Japan]*

Vol. 141 No. 1-2 (1993) 69-82
TOMIYAMA, A., ZUN, I., SOU, A., SAKAGUCHI, T., Numerical analysis of bubble motion with the VOF method *[Kobe Univ., Kobe, Hyogo, Japan; Univ. Ljubljana, Ljubljana, Slovenia]*

Vol. 141 No. 1-2 (1993) 83-100
HIJIKATA, K., LEE, S.-K., Heat and mass transfer enhancement in absorbing processes *[Samsung Electr., Suwon, South Korea; Tokyo Inst. Technol., Tokyo, Japan]*

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FUJII, T., AKAGAWA, K., Water hammer phenomena in a one-component two-phase bubbly flow *[Kobe Univ., Kobe, Hyogo, Japan; Ryukoku Univ., Fac. Sci. & Technol., Otsu, Japan]*

Vol. 141 No. 1-2 (1993) 111-121
ARITOMI, M., CHIANG, J.H., MORI, M., Geysering in parallel boiling channels *[Tokyo Elect. Power Co. Ltd., Tokyo, Japan; Tokyo Inst. Technol., Tokyo, Japan]*

Vol. 141 No. 1-2 (1993) 123-134
MATSUMOTO, Y., KAMEDA, M., Pressure wave phenomena in bubbly liquid *[Univ. Tokyo, Tokyo, Japan]*

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MURASE, M., KATAOKA, Y., FUJII, T., Evaporation and condensation heat transfer with a noncondensable gas present *[Hitachi Ltd., Hitachi, Ibaraki, Japan]*

Vol. 141 No. 1-2 (1993) 145-158
KATAOKA, I., SERIZAWA, A., BESNARD, D.C., Prediction of turbulence suppression and turbulence modeling in bubbly two-phase flow *[Ctr. Etud. Limeil Valenton, Villeneuve, France; Kyoto Univ., Kyoto, Japan]*

Vol. 141 No. 1-2 (1993) 159-176
JONES, O.C., LIN, J.-T., OVACIK, L., SHU, H.J., Impedance imaging relative to gas-liquid systems *[Rensselaer Polytech. Inst., Troy, NY, USA]*

Vol. 141 No. 1-2 (1993) 177-201
LAHEY, R.T. (JR.), LOPEZ DE BERTODANO, M., JONES, O.C. (JR.), Phase distribution in complex geometry conduits *[Rensselaer Polytech. Inst., Troy, NY, USA]*

Vol. 141 No. 1-2 (1993) 203-224
LAHEY, R.T. (JR.), PARK, J.-W., DREW, D.A., The analysis of void waves in two-phase flow *[Rensselaer Polytech. Inst., Troy, NY, USA]*

Vol. 141 No. 1-2 (1993) 225-236
JOO, S.W., DAVIS, S.H., BANKOFF, S.G., Two- and three-dimensional instabilities and rupture of thin liquid films falling on heated inclined plate *[Northwestern Univ., Evanston, IL, USA; Wayne State Univ., Detroit, MI, USA]*

Vol. 141 No. 1-2 (1993) 237-248
HENRY, C.E., HENRY, R.E., LAHEY, R.T., BANKOFF, S.G., Buoyantly-driven two-phase countercurrent flow in liquid discharge from a vessel with an unvented gas space *[Fauske & Assoc. Inc., Burr Ridge, IL, USA; Northwestern Univ., Evanston, IL, USA; Rensselaer Polytech. Inst., Troy, NY, USA]*

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CAREY, V.P., Two-phase flow in small-scale ribbed and finned passages for compact evaporators and condensers *[Univ. Calif. Berkeley, Berkeley, CA, USA]*

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SHAMSUNDAR, N., LIENHARD, J.H., Equations of state and spinodal lines – a review *[Univ. Houston, Houston, TX, USA]*

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KAGEYAMA, T., PETERSON, P.F., SCHROCK, V.E., Diffusion layer modeling for condensation in vertical tubes with noncondensable gases *[Univ. Calif. Berkeley, Berkeley, CA, USA]*

Vol. 141 No. 1-2 (1993) 303-313
WULFF, W., Computer simulation of two-phase flow in nuclear reactors *[Brookhaven Natl. Lab., Upton, NY, USA]*

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YAN, H., YUEN, W.W., THEOFANOUS, T.G., The use of fluorescence in the measurement of local liquid content in transient multiphase flows *[Univ. Calif. Santa Barbara, Santa Barbara, CA, USA]*

Vol. 141 No. 1-2 (1993) 329-342
WALLIS, G.B., The concept of polarization in dispersed two-phase potential flow *[Dartmouth Coll., Thayer Sch. Engn., Hanover, NH, USA]*

Vol. 141 No. 1-2 (1993) 343-355
KAWAJI, M., AHMAD, W., DE JESUS, J.M., SUTHARSHAN, B., LORENCEZ, C., OJHA, M., Flow visualization of two-phase flows using photochromic dye activation method *[Univ. Toronto, Toronto, Ontario, Canada]*

Vol. 141 No. 3 (1993) 361-373
NG, H.W., DAY, B.V., Behaviour of nonlinear supports on a PWR coolant system during a postulated LOCA. Part 1: Effect of modelling methods *[Nanyang Technol. Univ., Singapore, Singapore; Natl. Nucl. Corp. Ltd., Knutsford, Cheshire, England]*

Vol. 141 No. 3 (1993) 375-383
NG, H.W., DAY, B.V., Behaviour of nonlinear supports on PWR coolant system during a postulated LOCA. Part 2: Effects of stiffness variations and cavity pressurization *[Nanyang Technol. Univ., Singapore, Singapore; Natl. Nucl. Corp. Ltd., Knutsford, Cheshire, England]*

Vol. 141 No. 3 (1993) 385-393
KRUTZIK, N.J., TROPP, R., Verification of the local structural response of building structures in the anchorage areas of heavy components *[Siemens AG, KWU, Offenbach, Germany]*

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SATO, S., KURUMADA, A., KAWAMATA, K., SUZUKI, N., KANEKO, M., FUKUDA, K., Fracture mechanical properties and neutron irradiation effects of fuel compacts for the HTTR *[Ibaraki Univ., Hitachi, Ibaraki, Japan; Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan; Nucl. Fuel Ind. Ltd., Tokai, Ibaraki, Japan]*

Vol. 141 No. 3 (1993) 409-428
D'AURIA, F., DEBRECIN, N., GALASSI, G.M., GALEAZZI, S., Application of RELAP5/MOD3 to the evaluation of loss of feedwater in test facilities and in nuclear plants *[Univ. Pisa, Pisa, Italy; Univ. Zagreb, Zagreb, Croatia]*

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HUHTINIEMI, I.K., CORRADINI, M.L., Condensation in the presence of noncondensable gases *[Univ. Wisconsin, Madison, WI, USA]*

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BARTHOLOMÉ, G., KASTNER, W., KEIM, E., Design and calibration of leak detection systems by thermal hydraulics and fracture mechanics analyses *[Siemens AG, KWU, Erlangen, Germany]*

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BHANDARI, S., LEROUX, J.C., Evaluation of crack opening times and leakage areas for longitudinal cracks in a pressurized pipe. Part I. Model for maximum leak areas and its validation *[Fragema France, Framatome Fuel Div., Lyon, France; Framatome France, Paris, France]*

Vol. 142 No. 1 (1993) 21-25
BHANDARI, S., LEROUX, J.C., Evaluation of crack opening times and leakage areas for longitudinal cracks in a pressurized pipe. Part II. Application of proposed model and fracture dynamics *[Fragema France, Framatome Fuel Div., Lyon, France; Framatome France, Paris, France]*

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DONG, Y.M., YANG, W., HWANG, K.C., Elastic-plastic defect assessment based on ductile fracture process *[Tsing Hua Univ., Beijing, P.R. China]*

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HOJO, K., TAKENAKA, M., KAGUCHI, H., YAGAWA, G., YOSHIMURA, S., Applications of probabilistic fracture mechanics to FBR components *[Mitsubishi Heavy Ind. Co. Ltd., Kobe, Hyogo, Japan; Mitsubishi Heavy Ind. Co. Ltd., Takasago, Hyogo, Japan; Univ. Tokyo, Tokyo, Japan]*

Vol. 142 No. 1 (1993) 51-60
KIKUCHI, M., YOSHIMURA, S., AOKI, S., NISHIOKA, T., NAKAGAKI, N., MIYAZAKI, N., MUKAIMACHI, N., SASAKI, S., SHIMAKAWA, T., WATANABE, T., YAGAWA, G., Analysis of stable crack growth across welded fusion line: Japanese round-robin *[Century Res. Ctr., Nakase, Japan; JGC Corp., Yokohama, Kanagawa, Japan; Kawasaki Heavy Ind. Co. Ltd., Tokyo, Japan; Kobe Univ. Mercantile Marine, Kobe, Hyogo, Japan; Kyushu Inst. Technol., Iizuka, Japan; Kyushu Univ., Fukuoka, Japan; Nippon Marc, Tokyo, Japan; Sci. Univ. Tokyo, Noda, Chiba, Japan; Tokyo Inst. Technol., Tokyo, Japan; Univ. Tokyo, Tokyo, Japan]*

Vol. 142 No. 1 (1993) 61-68
KIM, Y.J., SON, S.H., CHOI, J.B., CHUNG, H.D., Development of elastic-plastic integrity evaluation system for pressure vessel and pipings *[Korea Inst. Nucl. Safety, Taejon, South Korea; Sung Kyun Kwan Univ., Suwon, South Korea]*

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LEIS, B.N., BRUST, F.W., Validation of room-temperature primary creep crack-growth analysis for surface-cracked pipes *[Battelle Mem. Inst., Columbus, OH, USA]*

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NICKELL, R.E., QUIÑONES, D.F., GILMAN, J., Evaluation of flawed piping under dynamic loading *[Appl. Sci. & Technol., Poway, CA, USA; Elect. Power Res. Inst., Palo Alto, CA, USA; RL Cloud & Assoc. Inc., Berkeley, CA, USA]*

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PITNER, P., RIFFARD, T., GRANGER, B., FLESCH, B., Application of probabilistic fracture mechanics to optimize the maintenance of PWR steam generator tubes *[Elect. France, Paris, France; Elect. France, St. Denis, France; Elect. France, Serv. Etud. & Projets Therm. & Nucl., Villeurbanne, France]*

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UTSUNOMIYA, T., WATANABE, K., Fracture criterion of a mixed-mode crack based on CED (Crack Energy Density) *[Niihama Natl. Coll. Technol., Niihama, Ehime, Japan; Univ. Tokyo, Tokyo, Japan]*

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PENNELL, W.E., Heavy-Section Steel Technology Program Overview *[Oak Ridge Natl. Lab., Oak Ridge, TN, USA]*

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COOPER, S.E., LOFGREN, E.V., SAMANTA, P.K., WONG, S.-M., Dependent failure analysis of NPP data bases *[Brookhaven Natl. Lab., Upton, NY, USA; Sci. Applicat. Int. Corp., Reston, VA, USA]*

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ELLINGWOOD, B.R., MORI, Y., Probabilistic methods for condition assessment and life prediction of concrete structures in nuclear power plants *[Johns Hopkins Univ., Baltimore, MD, USA]*

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PHILLIPS, J.H., ROESENER, W.S., MAGLEBY, H.L., GEIDL, V., Incorporation of passive components aging into PRAs *[EG&G Idaho Inc., Idaho Natl. Engn. Lab., Idaho Falls, ID, USA; Univ. Idaho, Moscow, ID, USA]*

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OLAND, C.B., NAUS, D.J., ARNDT, E.G., Research and development at the Structural Materials Information Center *[Oak Ridge Natl. Lab., Oak Ridge, TN, USA; US Nucl. Regulatory Commiss., Rockville, MD, USA]*

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LEHNER, J.R., LIN, C.C., NEOGY, P., Identification and assessment of containment and release management strategies *[Brookhaven Natl. Lab., Upton, NY, USA]*

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WESLEY, D.A., Interfacing Systems LOCA (ISLOCA) component pressure capacity methodology and typical plant results *[No address]*

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SHOTKIN, L.M., United States NRC Accident Management Program *[US Nucl. Regulatory Commiss., Washington, DC, USA]*

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CHEN, J.T., Consideration of external events in the individual plant examination program *[US Nucl. Regulatory Commiss., Washington, DC, USA]*

Vol. 142 No. 2-3 (1993) 239-253
VO, T.V., GORE, B.F., SIMONEN, F.A., DOCTOR, S.R., Risk assessment in setting inservice inspection priorities at Light Water Reactors *[Battelle Mem. Inst., Pacific Northwestern Labs, Richland, WA, USA]*

Vol. 142 No. 2-3 (1993) 255-266
PENNELL, W.E., Heavy-Section Steel Technology Program: recent developments in crack initiation and arrest research *[Oak Ridge Natl. Lab., Oak Ridge, TN, USA]*

Vol. 142 No. 2-3 (1993) 267-297
TSUKIMORI, K., LIU, W.K., URAS, R.A., Formulation of dynamic stability of fluid-filled shells *[Argonne Natl. Lab., Argonne, IL, USA; Northwestern Univ., Evanston, IL, USA]*

Vol. 142 No. 2-3 (1993) 299-318
TSUKIMORI, K., LIU, W.K., TSAO, Y.H., URAS, R.A., Dynamic stability characteristics of fluid-filled shells under multiple excitations *[Argonne Natl. Lab., Argonne, IL, USA; Northwestern Univ., Evanston, IL, USA]*

Vol. 142 No. 2-3 (1993) 319-326
EBISAWA, K., UGA, T., Evaluation methodology for seismic base isolation of nuclear equipments *[Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan]*

Vol. 142 No. 2-3 (1993) 327-339
NAUS, D.J., OLAND, C.B., ELLINGWOOD, B., MORI, Y., ARNDT, E.G., An overview of the ORNL/NRC program to address aging of concrete structures in nuclear power plants *[Johns Hopkins Univ. Hosp., Baltimore, MD, USA; Oak Ridge Natl. Lab., Oak Ridge, TN, USA; US Nucl. Regulatory Commiss., Washington, DC, USA]*

Vol. 142 No. 2-3 (1993) 341-351
KALKACH-NAVARRO, S., LAHEY, R.T. (JR.), DREW, D.A., MEYDER, R., Interfacial area density, mean radius and number density measurements in bubbly two-phase flow *[KFZ Karlsruhe*

GmbH, Karlsruhe, Germany; Rensselaer Polytech. Inst., Troy, NY, USA]

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WANG, D.Z., GAO, Z.Y., ZHENG, W.X., Technical design features and safety analysis of the 200 MWt Nuclear Heating Reactor *[Tsing Hua Univ., Beijing, P.R. China]*

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WANG, D.Z., ZHANG, D.F., DONG, D., GAO, Z.Y., LI, H.X., LIN, J.G., SU, Q.S., Experimental study and operation experiences of the 5 MWt Nuclear Heating Reactor *[Tsing Hua Univ., Beijing, P.R. China]*

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WANG, D.Z., The design characteristics and construction experiences of the 5 MWt Nuclear Heating Reactor *[Tsing Hua Univ., Beijing, P.R. China]*

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PETRANGELI, G., TONONI, R., D'AURIA, F., MAZZINI, M., The SSN: an emergency system based on intentional coolant depressurization for PWRs *[Ente Nazl. Energia Atom, Rome, Italy; Univ. Pisa, Pisa, Italy]*

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CHIANG, H.W., JONES, S.C.A., Simulating the mixing of helium and air by mixing salt water and fresh water in a scaled enclosure *[Atom Energy Canada Ltd. Res., Whiteshell Labs, Pinawa, Manitoba, Canada]*

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ROHATGI, U.S., NEYMOTIN, L.Y., WULFF, W., Assessment of RAMONA-3B methodology with oscillatory flow tests *[Brookhaven Natl. Lab., Upton, NY, USA]*

Vol. 143 No. 1 (1993) 83-93
MOHANTY, A.K., HALDAR, S.C., SENGUPTA, S., Low Reynolds number flow and heat transfer experiments in 7-rod vertical bundles *[Indian Inst. Technol., Dept. Mech. Engn., Kharagpur, West Bengal, India; Univ. Michigan, Dearborn, MI, USA]*

Vol. 143 No. 1 (1993) 95-109
MAVKO, B., STRITAR, A., PROSEK, A., Application of code scaling, applicability and uncertainty methodology to large break LOCA analysis of two loop PWR *[Jozef Stefan Inst., Ljubljana, Slovenia]*

Vol. 143 No. 1 (1993) 111-123
JONES, R.L., GILMAN, J.D., NELSON, J.L., Controlling stress corrosion cracking in Boiling Water Reactors *[Elect. Power Res. Inst., Palo Alto, CA, USA]*

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HERNALSTEEN, P., PWSCC in the tube expansion zone – an overview *[Laborelec, Linkebeek, Belgium]*

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GARUD, Y.S., Service stresses in expansion transitions of heat-exchanger U-tube joints *[S. Levy Inc., Campbell, CA, USA]*

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GARUD, Y.S., WATKINS, K.E., 3D stress/deflection analysis of tubesheet and U-tubes *[S. Levy Inc., Campbell, CA, USA]*

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MIDDLEBROOKS, W.B., HARROD, D.L., GOLD, R.E., Residual stresses associated with the hydraulic expansion of steam generator tubing into tubesheets *[Westinghouse Elect. Corp., Pensacola, FL, USA; Westinghouse Elect. Corp., Pittsburgh, PA, USA]*

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BROCKS, W., MÜLLER, W., NOACK, H.-D., VEITH, H., Fracture mechanics investigations on a pipe with a circumferential flaw supported by FEM *[Bundesanstalt Materialprüfung, Berlin, Germany]*

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IGUSA, T., SINHA, R., KOKUBO, E., FURUKAWA, S.-I., KAWAHATA, J.-I., Analysis of piping with hysteretic supports using response spectra *[Hitachi Ltd., Hitachi, Ibaraki, Japan; Mitsubishi Heavy Ind. Co. Ltd., Kobe, Hyogo, Japan; Northwestern Univ., Evanston, IL, USA; Toshiba Co. Ltd., Yokohama, Kanagawa, Japan]*

Vol. 143 No. 2-3 (1993) 201-215
BRUST, F.W., AHMAD, J., BRICKSTAD, B., FAIDY, C., GILLES, P., Comparisons between finite-element analysis predictions and pipe fracture experiments *[Battelle Mem. Inst., Columbus, OH, USA]*

Vol. 143 No. 2-3 (1993) 217-228
WANG, W.-C., CHEN, T.-L., HWANG, C.-H., Transient thermal stress intensity factors of edge-cracked semi-infinite plates *[Natl. Tsing Hua Univ., Hsinchu, Taiwan]*

Vol. 143 No. 2-3 (1993) 229-237
LEE, J.B., SONG, J.H., A study on the behavior of a crack located at the striping zone in a thermally stratified pipe *[Korea Adv. Inst. Sci. & Technol., Taejon, South Korea]*

Vol. 143 No. 2-3 (1993) 239-243
OKU, T., ETO, M., Relation between static and dynamic Young's modulus of nuclear graphites and carbon *[Ibaraki Univ., Hitachi, Ibaraki, Japan; Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan]*

Vol. 143 No. 2-3 (1993) 245-264
AKSAN, S.N., STIERLI, F., ANALYTIS, G.TH., Boil-off experiments with the PSI-NEPTUN facility: Analysis and code assessment overview report *[Paul Scherrer Inst., Villigen, Switzerland]*

Vol. 143 No. 2-3 (1993) 265-283
NO, H.C., ISHII, M., Scaling study of in-core boil-off and heating process *[Korea Adv. Inst. Sci. & Technol., Taejon, South Korea; Purdue Univ., West Lafayette, IN, USA]*

Vol. 143 No. 2-3 (1993) 285-294
YANAGISAWA, K., Behaviour of small-sized BWR fuel under reactivity initiated accident conditions in comparison with standard BWR fuel *[Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan]*

Vol. 143 No. 2-3 (1993) 295-300
CINOTTI, L., RIZZO, F.L., The Inherently Safe Immersed System (ISIS) reactor *[Ansaldo S.p.A., Genoa, Italy]*

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BRAUER, G., EICHHORN, F., Considerations about irradiation-induced precipitates in Soviet type reactor pressure vessel steels *[Forschungszentrum Rossendorf eV, Dresden, Germany]*

Vol. 144 No. 1 (1993) 1-7
MILELLA, P.P., MARICCHIOLO, C., PINI, A., BONORA, N., MARCHETTI, M., Cleavage fracture prediction and K_{Ic} assessment of a nuclear pressure vessel carbon steel using local approach criteria *[Ente Nazl. Energia Atom, Rome, Italy; Univ. Roma LA Sapienza, Rome, Italy]*

Vol. 144 No. 1 (1993) 9-21
DEIMEL, P., SATTLER, E., Relation between size and density of nonmetallic inclusions and the *J*-integral at crack initiation *[Univ. Stuttgart, Staatliche Materialprüfungsanstalt, Stuttgart, Germany]*

Vol. 144 No. 1 (1993) 23-29
SMITH, E., GRIESBACH, T.J., Quantifying the crack growth resistance of materials using J_t curves *[Elect. Power Res. Inst., Palo Alto, CA, USA; Univ. Manchester, Manchester, Lancs, England]*

Vol. 144 No. 1 (1993) 31-44
STUMPFROCK, L., ROOS, E., HUBER, H., WEBER, U., Fracture mechanics investigations on cylindrical large scale specimens under thermal shock loading *[Energie Versorgung Schwaben, Stuttgart, Germany; Univ. Stuttgart, Staatliche Materialprüfungsanstalt, Stuttgart, Germany]*

Vol. 144 No. 1 (1993) 45-52
NAGEL, G., BLAUEL, J.G., SCHMITT, W., A multibarrier safety concept for the reactor pressure vessel of the Stade Nuclear Power Plant *[Fraunhofer Inst. Werkstoffmech., Freiburg, Germany; Preussen Elektra AG, Hannover, Germany]*

Vol. 144 No. 1 (1993) 53-67
STAAT, M., Failure probabilities of the primary circuit pressure boundary of an HTR-Module for process heat generation under accident conditions for different failure modes *[KFA Jülich GmbH, Jülich, Germany]*

Vol. 144 No. 1 (1993) 69-76
ZDAREK, J., PECÍNKA, L., JOCH, J., LBB technology application to the primary piping system of the NPP V1 Jaslovske Bohunice *[Nucl. Res. Inst., Rez, Czech Republic]*

Vol. 144 No. 1 (1993) 77-90
OLSON, R.J., DARLASTON, B.J., MAYFIELD, M.E., SCHMIDT, R.A., The IPIRG dynamic pipe loop test facility *[Battelle Mem. Inst., Columbus, OH, USA; Berkeley Nucl. Labs, Berkeley, Glos, England; US Nucl. Regulatory Commiss., Washington, DC, USA]*

Vol. 144 No. 1 (1993) 91-99
CHARALAMBUS, B., LABES, M., Structural integrity of whipping pipes following a postulated circumferential break – a contribution to determining strain levels acceptable under faulted conditions *[Siemens AG, KWU, Erlangen, Germany; Siemens AG, KWU, Offenbach, Germany]*

Vol. 144 No. 1 (1993) 101-109
GREBNER, H., HÖFLER, A., HUNGER, H., Calculation of leakage areas and leak rates for wall penetrating cracks in pipes loaded with internal pressure and bending moment *[Ges. Reaktorsicherheit GmbH, Cologne, Germany; KFZ Karlsruhe GmbH, Karlsruhe, Germany]*

Vol. 144 No. 1 (1993) 111-122
AALTONEN, P., RINTAMAA, R., HÄNNINEN, H., EHRNSTÉN, U., ARILAHTI, E., Cyclic crack growth evaluation of a 20MnMoNi55 piping steel in high-oxygen reactor water *[Tech. Res. Ctr. Finland, Espoo, Finland]*

Vol. 144 No. 1 (1993) 123-138
BARTONICEK, J., ZAISS, W., SCHÖCKLE, F., BLIND, D., KOCKELMANN, H., HIENSTORFER, W., Fatigue assessment of power plant components and monitoring during operation *[AMTEC GmbH, Leinfelden, Germany; Gemeinschaftskernkraftwerk Neckar GmbH, Neckarwestheim, Germany; Staatliche Materialprüfungsanstalt, Stuttgart, Germany; Tech. Überwachungsverein Südwest eV, Filderstadt, Germany]*

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ERVE, M., TENCKHOFF, E., Residual life assessment, technical improvements and backfitting of components and systems from the materials standpoint *[Siemens AG, KWU, Erlangen, Germany]*

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BOCQUET, P., BOURGES, P., CHEVIET, A., Properties of heavy components of steel grade 91 and their welds *[Creusot Loire Ind., Le Creusot, France]*

Vol. 144 No. 1 (1993) 155-170
MAYER, K.H., BERGER, C., GNIRSS, G., HEINRICH, D., PRESTEL, W., Investigations by non-destructive inspection to determine the size of natural defects in large forgings of turbogenerators *[ASEA Brown Boveri AG, Mannheim, Germany; Maschinenfabrik Augsburg Nürnberg Energie GmbH, Nürnberg, Germany; Siemens AG, KWU, Mülheim, Germany]*

Vol. 144 No. 1 (1993) 171-175
OPPERMANN, W., KELLER, H.P., An improved potential drop method for measuring and monitoring defects in metallic structures *[Tech. Überwachungsverein Rheinland eV, Cologne, Germany]*

Vol. 144 No. 1 (1993) 177-198
VON BERNUS, L., MOHR, F., SCHMEIDL, T., Sizing and characterization of ultrasonic indications using imaging techniques *[Siemens AG, KWU, Erlangen, Germany]*

Vol. 144 No. 2 (1993) 205-211
OMOTO, A., TANABE, A., MORIYA, K., DILLMANN, C.W., ABWR evolution program *[GE, San Jose, CA, USA; Hitachi Ltd., Hitachi, Ibaraki, Japan; Tokyo Elect. Power Co. Ltd., Tokyo, Japan; Toshiba Co. Ltd., Yokohama, Kanagawa, Japan]*

Vol. 144 No. 2 (1993) 213-222
SHIRALKAR, B.S., ALAMGIR, MD., ANDERSEN, J.G.M., Thermal hydraulic aspects of the SBWR design *[GE, San Jose, CA, USA]*

Vol. 144 No. 2 (1993) 223-236
YOKOMIZO, O., KASHIWAI, S., NISHIDA, K., ORII, A., YAMASHITA, J., MOCHIDA, T., Spectral shift rod for the Boiling Water Reactor *[Hitachi Ltd., Hitachi, Ibaraki, Japan]*

Vol. 144 No. 2 (1993) 237-245
QUÉNIART, D., Safety of future reactors in France *[CEA, CEN, IPSN, Fontenay Aux Roses, France]*

Vol. 144 No 2 (1993) 247-256
MAKIHARA, Y., SUGIZAKI, T., NAKAHARA, Y., OKABE, K., KATO, T., MATSUOKA, T., TABUCHI, K., Study of the PWR hybrid safety system *[Mitsubishi Atom Power Ind. Inc., Tokyo, Japan; Mitsubishi Heavy Ind. Co. Ltd., Tokyo, Japan]*

Vol. 144 No. 2 (1993) 257-268
KUMAMARU, H., KUKITA, Y., Critical heat flux and heat transfer above mixture level under high-pressure boil-off conditions in PWR type and tight-lattice type fuel bundles *[Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan]*

Vol. 144 No. 2 (1993) 269-281
DUTTON, R., MOECK, E.O., SPINKS, N.J., COLEMAN, C.E., CHEADLE, B.A., LANE, A.D., MILLER, A.I., JUDD, R.A., LUPTON, L.R., Advanced technologies for CANDU reactors *[Atom Energy Canada Ltd. Res., Chalk River Nucl. Labs, Chalk River, Ontario, Canada]*

Vol. 144 No. 2 (1993) 283-292
MITA, S., AKEBI, M., SAWAMURA, O., KONDO, T., Development of the Advanced Thermal Reactor in Japan *[Elect. Power Dev. Co. Ltd., Tokyo, Japan; Power Reactor & Nucl. Fuel Dev. Corp., Tokyo, Japan]*

Vol. 144 No. 2 (1993) 293-303
MOCHIZUKI, H., KOIKE, M.H., SAKAI, T., Core coolability of an ATR by heavy water moderator in situations beyond design basis accidents *[Power Reactor & Nucl. Fuel Dev. Corp., Oarai, Ibaraki, Japan]*

Vol. 144 No. 2 (1993) 305-315
MUTO, Y., NAKAJIMA, H., ETO, M., Development of high temperature structural materials for the HTGR *[Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan]*

Vol. 144 No. 2 (1993) 317-325
HISHIDA, M., FUMIZAWA, M., TAKEDA, T., OGAWA, M., TAKENAKA, S., Researches on air ingress accidents of the HTTR *[Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan]*

Vol. 144 No. 2 (1993) 327-336
SILIN, V.A., VOZNESENSKY, V.A., AFROV, A.M., The Light Water Integral Reactor with natural circulation of the coolant at supercritical pressure B-500 SKDI *[Exptl. Design Org. Hydropress, Podolsk, Russia; Russian Res. Ctr., Kurchatov Inst., Moscow, Russia]*

Vol. 144 No. 2 (1993) 337-344
JEVREMOVIC, T., OKA, Y., KOSHIZUKA, S., Design of an indirect-cycle fast breeder reactor cooled by supercritical steam *[Univ. Tokyo, Tokai, Ibaraki, Japan]*

Vol. 144 No. 2 (1993) 345-352
TASAKA, K., IMAI, S., MASAOKA, H., TAMAKI, M., KUKITA, Y., Feedback control of a primary pump for safe and stable operation of a PIUS-type reactor *[Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan; Nagoya Univ., Nagoya, Aichi, Japan]*

Vol. 144 No. 2 (1993) 353-359
FURUTA, K., A constraint based approach to intelligent support of nuclear reactor design *[Univ. Tokyo, Tokyo, Japan]*

Vol. 144 No. 2 (1993) 361-373
MASSON, M., MALAISE, N., HOUSIAUX, A., DE KEYSER, V., Organizational change and human expertise in nuclear power plants: some implications for training and error prevention *[Univ. Liege, Fapse, Serv. Psychol. Travail & Entreprises, Liege, Belgium]*

Vol. 144 No. 2 (1993) 375-384
HOLLNAGEL, E., Requirements for dynamic modelling of man-machine interaction *[Human Reliabil. Assoc. Ltd., Dalton, Lancs, England]*

Vol. 144 No. 3 (1993) 389-397
CHAPMAN, T.L., RANGANATH, S., STEVENS, G.L., Application of advanced ultrasonic test techniques coupled with fatigue and leakage monitoring to assure integrity of BWR feedwater nozzles *[GE, San Jose, CA, USA]*

Vol. 144 No. 3 (1993) 399-408
LAUE, H., MORGENSTERN, F., ROHDENBURG, F., HOSEMANN, B., Role and demonstration of structural integrity of LMFBR structures within the frame of the safety assessment process *[Siemens AG, KWU, Bergisch Gladbach, Germany]*

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GOLEMBIEWSKI, H.-J., MIKSCH, M., Fatigue monitoring in German nuclear power plants *[Siemens AG, KWU, Erlangen, Germany]*

Vol. 144 No. 3 (1993) 423-429
FUKAKURA, J., ASANO, M., KIKUCHI, M., ISHIKAWA, M., Effect of thermal aging on fracture toughness of RPV steel *[Toshiba Co. Ltd., Yokohama, Kanagawa, Japan]*

Vol. 144 No. 3 (1993) 431-438
YANG, I.-J., LIN, M.-H., Failure analysis following decontamination – laboratory and case studies *[Ind. Technol. Res. Inst., Hsinchu, Taiwan]*

Vol. 144 No. 3 (1993) 439-447
MOCHIZUKI, M., ENOMOTO, K., OKAMOTO, N., SAITO, H., HAYASHI, E., Welding residual stresses at the intersection of a small diameter pipe penetrating a thick plate *[Hitachi Ltd., Hitachi, Ibaraki, Japan; Hitachi Ltd., Tsuchiura, Ibaraki, Japan]*

Vol. 144 No. 3 (1993) 449-457
KAI, J.J., TSAI, C.H., YU, G.P., The IGSCC, sensitization, and microstructure study of Alloys 600 and 690 *[Natl. Tsing Hua Univ., Hsinchu, Taiwan]*

Vol. 144 No. 3 (1993) 459-463
WICHMAN, K., LEE, S., Temporary non-code repair of ASME Code Class 3 piping *[US Nucl. Regulatory Commiss., Washington, DC, USA]*

Vol. 144 No. 3 (1993) 465-468
LIGHT, G.M., RUESCHER, E.H., BLOOM, E.A., JOSHI, N.R., TSAI, Y.M., LIU, S.-N., Application of the cylindrically guided wave technique for bolt and pump shaft inspections *[Elect. Power Res. Inst., Palo Alto, CA, USA; Iowa State Univ. Sci. & Technol., Ames, IA, USA; Southwestern Res. Inst., San Antonio, TX, USA]*

Vol. 144 No. 3 (1993) 469-485
HEJZLAR, P., UBRA, O., AMBROZ, J., A computer program for transient analysis of steam turbine generator overspeed *[Czech Tech. Univ., Prague, Czech Republic]*

Vol. 144 No. 3 (1993) 487-496
ROSENFIELD, A.R., Suggested toughness/temperature relations for reactor pressure vessel steels *[Battelle Mem. Inst., Columbus, OH, USA]*

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LIS, Z., LITEWKA, A., Theoretical model of creep fracture under tri-axial state of stress *[Poznan Tech. Univ., Poznan, Poland; Univ. Beira Interior, Covilha, Portugal]*

Vol. 144 No. 3 (1993) 509-515
CHAO, C.K., TSENG, C.C., Study on optimum zirconium liner thickness for barrier fuel *[Inst. Nucl. Energy Res., Lungtan, Taiwan; Natl. Taiwan Inst. Technol., Taipei, Taiwan]*

Vol. 145 No. 1-2 (1993) 1-35
YADIGAROGLU, G., NELSON, R.A., TESCHENDORFF, V., MURAO, Y., KELLY, J., BESTION, D., Modeling of reflooding *[CEA, CEN, DRN, DTP, STR, Grenoble, France; Ges. Reaktorsicherheit GmbH, Garching, Germany; Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan; Los Alamos Natl. Lab., Los Alamos, NM, USA; Swiss Fed. Inst. Technol., Zurich, Switzerland]*

Vol. 145 No. 1-2 (1993) 37-45
JANICOT, A., BESTION, D., Condensation modelling for ECC injection *[CEA, CEN, DRN, DTP, STR, Grenoble, France]*

Vol. 145 No. 1-2 (1993) 47-61
MAYINGER, F., WEISS, P., WOLFERT, K., Two-phase flow phenomena in full-scale reactor geometry *[Ges. Reaktorsicherheit GmbH, Garching, Germany; Siemens AG, KWU, Erlangen, Germany; Tech. Univ. Munich, Munich, Germany]*

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GLAESER, H., KARWAT, H., The contribution of UPTF experiments to resolve some scale-up uncertainties in countercurrent two-phase flow *[Ges. Reaktorsicherheit GmbH, Garching, Germany; Tech. Univ. Munich, Garching, Germany]*

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MURAO, Y., IGUCHI, T., AKIMOTO, H., IWAMURA, T., Large-scale multi-dimensional phenomena found in CCTF and SCTF experiments *[Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan]*

Vol. 145 No. 1-2 (1993) 97-111
MARCH-LEUBA, J., REY, J.M., Coupled thermohydraulic-neutronic instabilities in boiling water nuclear reactors: a review of the state of the art *[Consejo Seguridad Nucl., Madrid, Spain; Oak Ridge Natl. Lab., Oak Ridge, TN, USA]*

Vol. 145 No. 1-2 (1993) 113-130
BRAND, B., EMMERLING, R., FISCHER, CH., GAUL, H.-P., UMMINGER, K., Two-phase flow instrumentation *[Siemens AG, KWU, Erlangen, Germany]*

Vol. 145 No. 1-2 (1993) 131-145
MAHAFFY, J.H., Numerics of codes: stability, diffusion, and convergence *[Penn. State Univ., University Park, PA, USA]*

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BARRE, F., PARENT, M., BRUN, B., Advanced numerical methods for thermalhydraulics *[CEA, CEN, DRN, DTP, STR, Grenoble, France]*

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AKSAN, S.N., D'AURIA, F., STÄDTKE, H., User effects on the thermal-hydraulic transient system code calculations *[Commiss. European Communities, Euratom, Joint Res. Ctr., Ispra, Italy; Paul Scherrer Inst., Villigen, Switzerland; Univ. Pisa, Pisa, Italy]*

Vol. 145 No. 1-2 (1993) 175-205
IZQUIERDO, J.M., HORTAL, J., VANHOENACKER, L., Merits and limits of thermalhydraulic plant simulations – towards a unified approach to qualify plant models *[Consejo Seguridad Nucl., Madrid, Spain; Tractebel Energy Engn., Brussels, Belgium]*

Vol. 145 No. 1-2 (1993) 207-215
CORRADINI, M.L., HOHMANN, H., Multi-phase flow aspects of fuel–coolant interactions in reactor safety research *[Commiss. European Communities, Euratom, Joint Res. Ctr., Ispra, Italy; Univ. Wisconsin, Madison, WI, USA]*

Vol. 145 No. 1-2 (1993) 217-226
RÉOCREUX, M., PORRACCHIA, A., System thermalhydraulics during PWR severe accidents *[CEA, CEN, IPSN, DERS, St. Paul les Durance, France]*

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HYVÄRINEN, J., The inherent boron dilution mechanism in pressurized water reactors *[Finnish Ctr. Radiat. & Nucl. Safety, Helsinki, Finland]*

Vol. 145 No. 1-2 (1993) 241-259
D'AURIA, F., MODRO, M., ORIOLO, F., TASAKA, K., Relevant thermalhydraulic aspects of new generation LWRs *[EG&G Idaho Inc., Idaho Natl. Engn. Lab., Idaho Falls, ID, USA; Nagoya Univ., Nagoya, Aichi, Japan; Univ. Pisa, Pisa, Italy]*

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SONNENBURG, H.G., TUOMISTO, H., Analysis of a selected two-phase flow phenomenon in VVER reactors with horizontal steam generators *[Ges. Reaktorsicherheit GmbH, Garching, Germany; Imatra Power Co., Vantaa, Finland]*

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WARD, D.A., Proposed criteria to accommodate severe accidents in containment design *[David Ward Assoc. Inc., North Augusta, SC, USA]*

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DE BOECK, B., A review of containment accidents *[AIB Vincotte, Brussels, Belgium]*

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SAMMATARO, R.F., SOLONICK, W.R., EDWARDS, N.W., A generic approach for steel containment vessel success criteria for severe accident loads *[Gen. Dynam. Corp., Div. Elect. Boat, Groton, CT, USA; NWE Serv. Inc., Morgan Hill, CA, USA]*

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LEAVER, D.E.W., ADDITON, S.L., ALWR utility requirements document containment performance requirements *[Polestar Appl. Technol. Inc., Los Altos, CA, USA; Tenera, Berkeley, CA, USA]*

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RAY, S.S., Study of available margins of containments against structural failure *[Taylor Woodrow Engn. Ltd., Southall, Middx, England]*

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AMIN, M., EBERHARDT, A.C., ERLER, B.A., Design considerations for concrete containments under severe accident loads *[Sargent & Lundy Engn., Chicago, IL, USA]*

Vol. 145 No. 3 (1993) 339-353
SAITO, H., MURAMATSU, Y., FURUKAWA, H., HASEGAWA, T., MUTOH, A., Post-test analysis of a 1:10-scale top slab model of ABWR/RCCV subjected to internal pressure *[Hitachi Ltd., Hitachi, Ibaraki, Japan; Shimizu Corp., Tokyo, Japan; Tokyo Elect. Power Co. Ltd., Tokyo, Japan; Toshiba Co. Ltd., Tokyo, Japan]*

Vol. 145 No. 3 (1993) 355-364
CARCASSI, M.N., FINESCHI, F., A theoretical and experimental study on the hydrogen vented deflagration *[Univ. Pisa, Pisa, Italy]*

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YAMANO, N., SUGIMOTO, J., MARUYAMA, Y., HIDAKA, A., KUDO, T., SODA, K., Small-scale component experiments of the penetration leak characterization test in the ALPHA program *[Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan]*

Vol. 145 No. 3 (1993) 375-386
HIRAO, K., ZAMA, T., GOTO, M., NARUSE, Y., SAITO, K., SUZUKI, T., SUGINO, H., High-temperature leak-characteristics of PCV hatch flange gasket *[Hitachi Ltd., Hitachi, Ibaraki, Japan; Ishikawajima Harima Heavy Ind. Co. Ltd., Yokohama, Kanagawa, Japan; Tokyo Elect. Power Co. Ltd., Tokyo, Japan; Toshiba Co. Ltd., Yokohama, Kanagawa, Japan]*

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SPLETZER, B.L., LAMBERT, L.D., BERGMANN, V.L., WEATHERBY, J.R., Testing and analyses to investigate liner tearing of the 1:6-scale reinforced concrete containment building *[Sandia Natl. Labs, Albuquerque, NM, USA]*

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ANDREOLI, V., ANGELONI, P., CONTRI, P., BRUSA, L., Numerical simulation of the ultimate load capacity of a reactor containment building *[Ente Nazl. Energia Atom, Rome, Italy; Ismes S.p.A., Bergamo, Italy]*

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BROWN, J.A., TICE, G.A., Containment penetrations – Flexible metallic bellows: Testing, safety, life extension issues *[Pacific Nucl. Syst. Inc., Naperville, IL, USA]*

Vol. 145 No. 3 (1993) 431-438
KIM, I.G., KIM, H.-J., A review on operating experiences of containment isolation systems in Korea *[Korea Inst. Nucl. Safety, Taejon, South Korea]*

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THEOFANOUS, T.G., ANGELINI, S., YAN, H., Universal treatment of plumes and stresses for pressurized thermal-shock evaluations *[Univ. Calif. Santa Barbara, Santa Barbara, CA, USA]*

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BABELLI, I., REVANKAR, S.T., ISHII, M., Flow visualization study of postcritical heat-flux in inverted flow *[Purdue Univ., West Lafayette, IN, USA]*

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WATANABE, O., MOTOMIYA, Y., TAKEDA, H., KOGA, T., An application of a higher-order finite-difference method to a natural-convection experiment in the hot plenum of an LMFBR *[Cent. Res. Inst. Elect. Power Ind., Abiko, Chiba, Japan; Mitsubishi Atom Power Ind. Inc., Tokyo, Japan]*

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KLUG, F., MAYINGER, F., Impedance based flow reconstruction: A novel flow composition measuring technique for multi-phase-flows *[Tech. Univ. Munich, Munich, Germany]*

Vol. 146 No. 1-3 (1994) 43-52
DEBERTODANO, M.L., LAHEY, R.T., JONES, O.C., Turbulent bubbly two-phase flow data in a triangular duct *[Rensselaer Polytech. Inst., Troy, NY, USA]*

Vol. 146 No. 1-3 (1994) 53-70
KATAOKA, I., ISHII, M., SERIZAWA, A., Sensitivity analysis of bubble-size and probe geometry on the measurements of interfacial area concentration in gas-liquid two-phase flow *[Kyoto Univ., Kyoto, Japan; Purdue Univ., West Lafayette, IN, USA]*

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MEYER, L., Measurements of turbulent velocity and temperature in axial-flow through a heated rod bundle *[KFZ Karlsruhe GmbH, Karlsruhe, Germany]*

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ANGELINI, S., TAKARA, E., YUEN, W.W., THEOFANOUS, T.G., Multiphase transients in the premixing of steam explosions *[Univ. Calif. Santa Barbara, Santa Barbara, CA, USA]*

Vol. 146 No. 1-3 (1994) 97-108
DENHAM, M.K., TYLER, A.P., FLETCHER, D.F., Experiments on the mixing of molten uranium-dioxide with water and initial comparisons with CHYMES code calculations *[UKAEA Technol., Culham Lab., Culham, Oxon, England; UKAEA Technol., Winfrith Technol. Ctr., Dorchester, Dorset, England]*

Vol. 146 No. 1-3 (1994) 109-132
CICCARELLI, G., FROST, D.L., Fragmentation mechanisms based on single drop steam explosion experiments using flash X-ray radiography *[Brookhaven Natl. Lab., Upton, NY, USA; McGill Univ., Montreal, Quebec, Canada]*

Vol. 146 No. 1-3 (1994) 133-146
YUEN, W.W., CHEN, X., THEOFANOUS, T.G., On the fundamental microinteractions that support the propagation of steam explosions *[Univ. Calif. Santa Barbara, Santa Barbara, CA, USA]*

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EPSTEIN, M., FAUSKE, H.K., A crystallization theory of underwater aluminum ignition *[Fauske & Assoc. Inc., Burr Ridge, IL, USA]*

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FROST, D.L., LEE, J.H.S., THIBAULT, P., Numerical computation of underwater explosions due to fuel coolant interactions *[Combust. Dynam. Inc., Medicine Hat, AB, Canada; McGill Univ., Montreal, Quebec, Canada]*

Vol. 146 No. 1-3 (1994) 181-194
FUKETA, T., FUJISHIRO, T., Generation of destructive forces during fuel coolant interactions under severe reactivity initiated accident conditions *[Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan]*

Vol. 146 No. 1-3 (1994) 195-206
GABOR, J.D., PURVIANCE, R.T., CASSULO, J.C., SPENCER, B.W., Molten aluminum-alloy fuel fragmentation experiments *[Argonne Natl. Lab., Argonne, IL, USA]*

Vol. 146 No. 1-3 (1994) 207-224
LAFI, A.Y., REYES, J.N., A general theory for flooding implementing cuspoids catastrophe *[Oregon State Univ., Dept. Nucl. Engn., Corvallis, OR, USA]*

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LEE, J.Y., NO, H.C., Hyperbolicity breaking and flooding *[Cheju Natl. Univ., Cheju, South Korea; Korea Adv. Inst. Sci. & Technol., Seoul, South Korea]*

Vol. 146 No. 1-3 (1994) 241-252
CHIANG, J.H., ARITOMI, M., INOUE, R., MORI, M., Thermohydraulics during start-up in natural circulation boiling water-reactors *[Tokyo Elect. Power Co. Ltd., Tokyo, Japan; Tokyo Inst. Technol., Tokyo, Japan]*

Vol. 146 No. 1-3 (1994) 253-265
ABE, N., YOKOBORI, S., NAGASAKA, H., TSUNOYAMA, S., Two-phase flow natural circulation characteristics inside BWR vessels *[Toshiba Co. Ltd., Kawasaki, Kanagawa, Japan; Toshiba Co. Ltd., Yokohama, Kanagawa, Japan]*

Vol. 146 No. 1-3 (1994) 267-276
MCELIGOT, D.M., O'BRIEN, J.E., STOOTS, C.M., LARSON, T.K., CHRISTENSON, W.A., MECHAM, D.C., LUSSIE, W.G., Natural convection between a vertical cylinder and a surrounding array *[EG&G Idaho Inc., Idaho Natl. Engn. Lab., Idaho Falls, ID, USA]*

Vol. 146 No. 1-3 (1994) 277-288
ROSA, M.P., PODOWSKI, M.Z., Nonlinear effects in two-phase flow dynamics *[Rensselaer Polytech. Inst., Troy, NY, USA]*

Vol. 146 No. 1-3 (1994) 289-299
BEELMAN, R.J., FLETCHER, C.D., MODRO, S.M., Issues affecting advanced passive light-water reactor safety analysis *[EG&G Idaho Inc., Idaho Natl. Engn. Lab., Idaho Falls, ID, USA]*

Vol. 146 No. 1-3 (1994) 301-309
INAGAKI, Y., TAKADA, S., HAYASHI, H., KOBAYASHI, T., OHTA, Y., SHIMOMURA, H., MIYAMOTO, Y., Cooling performance of helium-gas water-coolers in HENDEL *[Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan]*

Vol. 146 No. 1-3 (1994) 311-323
YIN, S.T., CARDELLA, A., ABDELMESSIH, A.H., JIN, Z., BROMLEY, B.P., Assessment of a heat-transfer correlations package for water-cooled plasma facing components in fusion reactors *[Atom Energy Canada Ltd. Res., Chalk River Nucl. Labs, Chalk River, Ontario, Canada; Max Planck Inst., Garching, Germany; Univ. Toronto, Toronto, Ontario, Canada]*

Vol. 146 No. 1-3 (1994) 325-335
LIAO, C.P., KAZIMI, M.S., LABOMBARD, B., MHD effects on liquid-metal film flow *[MIT, Cambridge, MA, USA]*

Vol. 146 No. 1-3 (1994) 337-348
LIU, J.C., COLELLA, P., PETERSON, P.F., SCHROCK, V.E., Modeling supersonic flows through a gas continuous two-fluid medium *[Univ. Calif. Berkeley, Berkeley, CA, USA]*

Vol. 146 No. 1-3 (1994) 349-362
YING, A.Y., ABDOU, M.A., Solid breeder thermal transient under purge-line-break accidents *[Univ. Calif. Los Angeles, Los Angeles, CA, USA]*

Vol. 146 No. 1-3 (1994) 363-371
EGUCHI, Y., TANAKA, N., Experimental study on scale effect on gas entrainment at free surface *[Cent. Res. Inst. Elect. Power Ind., Abiko, Chiba, Japan]*

Vol. 146 No. 1-3 (1994) 373-381
EGUCHI, Y., YAMAMOTO, K., FUNADA, T., TANAKA, N., MORIYA, S., TANIMOTO, K., OGURA, K., SUZUKI, T., MAEKAWA, I., Gas entrainment in the IHX vessel of top-entry loop-type LMFBR *[Cent. Res. Inst. Elect. Power Ind., Tokyo, Japan; Hitachi Ltd., Tokyo, Japan; Japan Atom Power Co. Inc., Tokyo, Japan; Kawasaki Heavy Ind. Co. Ltd., Akashi, Japan; Mitsubishi Heavy Ind. Co. Ltd., Kobe, Hyogo, Japan; Toshiba Co. Ltd., Kawasaki, Kanagawa, Japan]*

Vol. 146 No. 1-3 (1994) 383-390
STEHLE, H., DAMM, G., JANSING, W., Large-scale experiments with a 5 MW sodium-air heat-exchanger for decay heat removal *[Siemens AG, KWU, Bergisch Gladbach, Germany]*

Vol. 146 No. 1-3 (1994) 391-408
JERNG, D.W., TODREAS, N.E., Mixed convective flow penetration in vertical channels *[MIT, Cambridge, MA, USA]*

Vol. 146 No. 1-3 (1994) 409-416
WOLF, L., KNEER, A., SCHULZ, R., GIANNIKOS, A., HÄFNER, W., Passive heat removal experiments for an advanced HTR-module reactor pressure vessel and cavity design *[Battelle Ingn. Tech. GmbH, Eschborn, Germany]*

Vol. 146 No. 1-3 (1994) 417-426
KANZLEITER, T.F., FISCHER, K.O., Multicompartment hydrogen deflagration experiments and model development *[Battelle Ingn. Tech. GmbH, Eschborn, Germany]*

Vol. 146 No. 1-3 (1994) 427-437
SIEFKEN, L.J., OLSEN, M.V., A model for the effect of Inconel grid spacers on progression of damage in-reactor core *[EG&G Idaho Inc., Idaho Natl. Engn. Lab., Idaho Falls, ID, USA]*

Vol. 146 No. 1-3 (1994) 439-450
FELTUS, M.A., Coupled 3-D kinetics thermal-hydraulic analysis of hot zero power main steam line breaks using RETRAN and STAR codes *[Penn. State Univ., University Park, PA, USA]*

Vol. 146 No. 1-3 (1994) 451-461
SAITO, M., YAMAOKA, N., MIYAZAKI, K., KINOSHITA, M., ABE, Y., Boiling two-phase flow under microgravity *[Mitsubishi Heavy Ind. Co. Ltd., Takasago, Hyogo, Japan]*

Vol. 146 No. 1-3 (1994) 463-471
WOODRUFF, S.B., Some computational challenges of developing efficient parallel algorithms for data-dependent computations in thermal-hydraulics supercomputer applications *[Los Alamos Natl. Lab., Los Alamos, NM, USA]*

Vol. 146 No. 1-3 (1994) 473-481
PORSCHING, T.A., HALL, C.A., A network method for homogeneous, thermally expandable two-phase flow on unstructured triangular grids *[Univ. Pittsburgh, Pittsburgh, PA, USA]*

Vol. 147 No. 1 (1994) 1-16
BROGLI, R., MOLDASCH, H., RUMMEL, I., Results of the verification period 1985-1990 of the German-Swiss high converting reactor PWR-C1 *[Paul Scherrer Inst., Villigen, Switzerland; Siemens AG, KWU, Erlangen, Germany]*

Vol. 147 No. 1 (1994) 17-22
MINGES, J., SCHÜTZ, W., Experiments on the enrichment of cesium in the cover gas aerosol of the European Fast Reactor EFR *[KFZ Karlsruhe GmbH, Karlsruhe, Germany]*

Vol. 147 No. 1 (1994) 23-28
ADAMOV, E.O., GROZDOV, I.I., KUZNETSOV, S.P., PETROV, A.A., ROZHDESTVENSKY, M.I., CHERKASHOV, YU.M., Perspective channel-type reactor with enhanced safety *[R&D Inst. Power Engn., Moscow, Russia]*

Vol. 147 No. 1 (1994) 29-38
KLEIN, U., SINGH, J., BARNERT, H., HOHN, H., After heat removal by a closed secondary cooler circuit on the example of the advanced high temperature reactor AHTR 500 with central graphite column *[KFA Jülich GmbH, Jülich, Germany]*

Vol. 147 No. 1 (1994) 39-46
DRECKER, S., SINGH, J., BARNERT, H., Temperature equalization phenomenon in a high temperature reactor core with central column *[KFA Jülich GmbH, Jülich, Germany]*

Vol. 147 No. 1 (1994) 47-51
ABOU-RJEILY, Y., BAROIS, G., Numerical prediction of stratified pipe flows in PWRs *[Framatome France, Paris, France]*

Vol. 147 No. 1 (1994) 53-62
BÖHMERT, J., DIETRICH, M., LINEK, J., Comparative studies on high-temperature corrosion of ZrNb1 and Zircaloy-4 *[Forschungszentrum Rossendorf eV, Dresden, Germany; KFA Jülich GmbH, Jülich, Germany]*

Vol. 147 No. 1 (1994) 63-78
SCHIRRA, M., Creep rupture strength and creep tests on the EFR structural material 316L(N), DIN 1.4909 *[KFZ Karlsruhe GmbH, Karlsruhe, Germany]*

Vol. 147 No. 1 (1994) 79-84
GREBNER, H., HUNGER, H., HÖFLER, A., Experiments and calculations on crack opening and leak rate of a pipe branch within the HDR program *[Ges. Reaktorsicherheit GmbH, Cologne, Germany; KFZ Karlsruhe GmbH, Karlsruhe, Germany]*

Vol. 147 No. 1 (1994) 85-91
ROYL, P., PFRANG, W., STRUWE, D., Reactivity feedback evaluation of material relocations in the Cabri-1 experiments with fuel worth distributions from SNR-300 *[KFZ Karlsruhe GmbH, Karlsruhe, Germany]*

Vol. 147 No. 1 (1994) 93-100
ROTHFUSS, H., STAUSEBACH, D., ULLRICH, M., Metallic core internals of the modular HTR *[Siemens AG, KWU, Bergisch Gladbach, Germany]*

Vol. 147 No. 1 (1994) 101-104
DUWE, R., KÜHNLEIN, W., SCHRÖDER, R., Measurements to distinguish fuel elements with and without thorium content by gamma-spectrometry in hot cells *[KFA Jülich GmbH, Jülich, Germany]*

Vol. 147 No. 1 (1994) 105-110
AISCH, F.-W., FUCHS, H.-P., LETTAU, H., FOCUS-type fuel assembly for PWRs *[Siemens AG, KWU, Erlangen, Germany]*

Vol. 147 No. 1 (1994) 111-114
FILSS, P., ENGE, R., Detection of alpha emitters in solidified radioactive waste *[KFA Jülich GmbH, Jülich, Germany]*

Vol. 147 No. 1 (1994) 115-118
FÖRCH, H., OLIVER, T., HERTLE, W., Chemical cleaning of PWR steam generators with a low temperature process *[ASEA Brown Boveri AG, Mannheim, Germany]*

Vol. 147 No. 1 (1994) 119-123
ENGELMANN, H.-J., KHAMIS, M., LEMPERT, J., Calculation of neutron dose rates including backscattering of a POLLUX cask in drifts of a repository mine *[Deutsche Ges. Bau & Betrieb Endlagern Abfallstoffe mbH, Peine, Germany]*

Vol. 147 No. 2 (1994) 129-139
MOCHIO, T., A proposal for safety factor estimation in seismic PSA of structure by stochastic FEM technique *[Mitsubishi Heavy Ind. Co. Ltd., Nagasaki, Japan]*

Vol. 147 No. 2 (1994) 141-155
PIRES, J.A., Statistics of cumulative damage parameters based on hysteretic energy dissipated *[Univ. Calif. Irvine, Irvine, CA, USA]*

Vol. 147 No. 2 (1994) 157-170
PIRES, J.A., ANG, A.H.-S., KATAYAMA, I., Probabilistic evaluation of lateral extent of soil liquefaction under earthquake loading *[Adv. Engn. Operat. Ctr., Tokyo, Japan; Univ. Calif. Irvine, Irvine, CA, USA]*

Vol. 147 No. 2 (1994) 171-181
TSURUI, A., TANAKA, H., TANAKA, T., An analytical method for leak before break assessment based upon stochastic fracture mechanics *[Fukui Prefectural Univ., Fukui, Japan; Kyoto Univ., Kyoto, Japan]*

Vol. 147 No. 2 (1994) 183-196
HIRATA, K., SOMAKI, T., Fragility estimation of an isolated FBR structure considering the ultimate state of rubber bearings *[Cent. Res. Inst. Elect. Power Ind., Abiko, Chiba, Japan; Obayashi Corp., Tokyo, Japan]*

Vol. 147 No. 2 (1994) 197-210
EBISAWA, K., ABE, K., MURAMATSU, K., ITOH, M., KOHNO, K., TANAKA, T., Evaluation of response factors for seismic probabilistic safety assessment of nuclear power plants *[Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan; NKK Corp., Tokyo, Japan; Sato Kogyo Co. Ltd., Atsugi, Japan]*

Vol. 147 No. 2 (1994) 211-230
MIZUTANI, M., TAKEDA, M., KAI, Y., MATSUBARA, M., A study on the applicability of the response estimation of a PRA procedure *[Shimizu Corp., Tokyo, Japan; Tokyo Elect. Power Co. Ltd., Tokyo, Japan]*

Vol. 147 No. 3 (1994) 235-249
SAUDY, A., AZIZ, T., GHOBARAH, A., A new stochastic analysis for multiple supported MDOF secondary systems: I. Dynamic interaction effects *[McMaster Univ., Hamilton, Ontario, Canada]*

Vol. 147 No. 3 (1994) 251-262
SAUDY, A., AZIZ, T., GHOBARAH, A., A new stochastic analysis for multiple supported MDOF secondary systems: II. Tuning and spatial coupling effects *[McMaster Univ., Hamilton, Ontario, Canada]*

Vol. 147 No. 3 (1994) 263-274
LI, W.Q., TSAI, C.S., Seismic mitigation of structures by using viscoelastic dampers *[SUNY Buffalo, Buffalo, NY, USA]*

Vol. 147 No. 3 (1994) 275-286
LEE, K.B., IM, I.Y., An analytical study on the pump-induced acoustic pressure in a pressurized water reactor *[Korea Atom Energy Res. Inst., Taejon, South Korea]*

Vol. 147 No. 3 (1994) 287-298
MAJUMDAR, P., GUPTA, A., MARCHERTAS, A., Stress analysis of heated concrete using finite elements *[North Illinois Univ., De Kalb, IL, USA]*

Vol. 147 No. 3 (1994) 299-309
MERTENS, P.G., A new algebraic white-noise modal combination rule – GAC(A) *[Westinghouse Energy Syst. Int., Brussels, Belgium]*

Vol. 147 No. 3 (1994) 311-319
TALIYAN, S.S., ROY, D.P., GROVER, R.B., SINGH, M., GOVINDARAJAN, G., Dynamics of shut-off rod drop in a PHWR *[Bhabha Atom Res. Ctr., Bombay, India; Indian Inst. Technol., Dept. Mech. Engn., Bombay, India]*

Vol. 147 No. 3 (1994) 321-335
GREENE, R.H., BWR control rod drive system aging *[Oak Ridge Natl. Lab., Oak Ridge, TN, USA]*

Vol. 147 No. 3 (1994) 337-349
SMITH, E., A comparison of the use of the modified *J*-integral and the deformation *J*-integral in procedures for estimating the critical crack length for CANDU pressure tubes *[Univ. Manchester, Manchester, Lancs, England]*

Vol. 147 No. 3 (1994) 351-357
BROWN, D.P., BLAHNIK, D.E., BURNS, J.J. (JR.), Snubber aging assessment *[Battelle Mem. Inst., Pacific Northwestern Labs, Richland, WA, USA; Lake Engn. Co., Greenville, RI, USA; US Nucl. Regulatory Commiss., Rockville, MD, USA]*

Vol. 147 No. 3 (1994) 359-368
CIZELJ, L., MAVKO, B., RIESCH-OPPERMANN, H., Application of first and second order reliability methods in the safety assessment of cracked steam generator tubing *[Jozef Stefan Inst., Ljubljana, Slovenia; KFZ Karlsruhe GmbH, Karlsruhe, Germany]*

Vol. 147 No. 3 (1994) 369-374
HOFSTOTTER, P., Inservice measurements on piping systems and components in nuclear power plants *[Tech. Überwachungsverein Rheinland eV, Cologne, Germany]*

Vol. 147 No. 3 (1994) 375-383
LOFARO, R.J., Detecting and mitigating aging in component cooling water systems *[Brookhaven Natl. Lab., Upton, NY, USA]*

Vol. 147 No. 3 (1994) 385-391
CAVICCHIA, V., BASSANELLI, A., TRAINI, E., KOPELIC, S.D., LIPARULO, N.J., SHARP, D.R., Insights from the AP600 probabilistic safety study *[Ente Nazl. Energia Atom, Rome, Italy; Westinghouse Elect. Corp., Pittsburgh, PA, USA]*

Vol. 147 No. 3 (1994) 393-401
JIN, W.-L., LUZ, E., Improving importance sampling method in structural reliability *[Dalian Univ. Technol., Dalian, P.R. China; Univ. Stuttgart, Stuttgart, Germany]*

Vol. 147 No. 3 (1994) 403-408
SESHADRI, B.S., VENKATESAN, R., Streamed spectra of fast neutrons through airducts in concrete *[Indira Gandhi Ctr. Atom Res., Kalpakkam, India]*

Vol. 147 No. 3 (1994) 409-424
LOMPERSKI, S.W., KOUHIA, J., Natural circulation experiments with a VVER reactor geometry *[Tech. Res. Ctr. Finland, Lappeenranta, Finland]*

Vol. 147 No. 3 (1994) 425-435
LIANG, K.-S., GRIFFITH, P., Experimental and analytical study of direct contact condensation of steam in water *[Inst. Nucl. Energy Res., Lungtan, Taiwan; MIT, Cambridge, MA, USA]*

Vol. 147 No. 3 (1994) 437-446
GALLMEIER, F., STEICHELE, E., Neutron flux and reactivity calculations for an optimized arrangement of experimental facilities in a research reactor *[Tech. Univ. Munich, Garching, Germany]*

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MO, Y.L., A small bore piping design expert system *[Natl. Cheng Kung Univ., Tainan, Taiwan]*

Vol. 147 No. 3 (1994) 455-461
TANAKA, T., SUZUKI, S., NEKOMOTO, Y., TANAKA, M., The development of a diagnostic and monitoring system for vibrating pipe branches *[Mitsubishi Heavy Ind. Co. Ltd., Kobe, Hyogo, Japan]*

Vol. 148 No. 1 (1994) 1-15
MURTY, K.L., JALLEPALLI, R., MAHMOOD, S.T., Effects of recrystallization and Nb additions on texture and mechanical anisotropy of Zircaloy *[North Carolina State Univ., Raleigh, NC, USA]*

Vol. 148 No. 1 (1994) 17-25
SHANN, S.H., VAN SWAM, L.F., Creep anisotropy of Zircaloy-2 cladding during irradiation *[Siemens Nucl. Power Corp., Richland, WA, USA]*

Vol. 148 No. 1 (1994) 27-39
NAGASHIMA, H., KOKUBO, K., HATSUDA, T., Study on buckling of square tubes under bending loads *[Hitachi Ltd., Tsuchiura, Ibaraki, Japan]*

Vol. 148 No. 1 (1994) 41-52
NAKAJIMA, T., SAITO, H., OSAKA, T., FEMAXI-IV: a computer code for the analysis of thermal and mechanical behavior of light water reactor fuel rods *[Century Res. Ctr. Corp. Ltd., Tokyo, Japan; Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan]*

Vol. 148 No. 1 (1994) 53-69
ITOH, K., KINJO, H., MIMURA, Y., Development of a 3-D FBR fuel bundle-to-duct interaction analysis code MARSE *[Mitsubishi Atom Power Ind. Inc., Tokyo, Japan; Mitsubishi Heavy Ind. Co. Ltd., Tokyo, Japan]*

Vol. 148 No. 1 (1994) 71-81
IYOKU, T., FUTAKAWA, M., ISHIHARA, M., Evaluation of aseismic integrity in HTTR core-bottom structure. I. Aseismic test for core-bottom structure *[Japan Atom Energy Res. Inst., Oarai, Ibaraki, Japan; Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan]*

Vol. 148 No. 1 (1994) 83-90
FUTAKAWA, M., IYOKU, T., SHIRAI, H., TAKADA, S., ISHIHARA, M., Evaluation of aseismic integrity in HTTR core-bottom structure. II. Vibrational characteristics of keyed graphite components *[CSK Co., Tokyo, Japan; Japan Atom Energy Res. Inst., Oarai, Ibaraki, Japan; Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan]*

Vol. 148 No. 1 (1994) 91-100
ISHIHARA, M., IYOKU, T., FUTAKAWA, M., Evaluation of aseismic integrity in HTTR core-bottom structure. III. Structural integrity of core support post component *[Japan Atom Energy Res. Inst., Oarai, Ibaraki, Japan; Japan Atom Energy Res. Inst., Tokai, Ibaraki, Japan]*

Vol. 148 No. 1 (1994) 101-108
DYKES, E.R., An advanced ultrasonic system for BWR vessel weld inspection *[GE, San Jose, CA, USA]*

Vol. 148 No. 1 (1994) 109-117
JEONG, J.H., NO, H.C., Classification of flooding data according to type of tube-end geometry *[Korea Adv. Inst. Sci. & Technol., Taejon, South Korea]*

Vol. 148 No. 1 (1994) 119-128
FERNG, Y.-M., LEE, C.-H., Numerical simulation of natural circulation experiments conducted at the IIST facility *[Inst. Nucl. Energy Res., Lungtan, Taiwan]*

Vol. 148 No. 2-3 (1994) 133-150
ROTH-SEEFRID, H., FEIGEL, A., MOSER, H.-J., Implementation of bleed and feed procedures in Siemens PWRs *[Siemens AG, KWU, Erlangen, Germany]*

Vol. 148 No. 2-3 (1994) 151-159
LÖWENHIELM, G., ENGQVIST, A., ESPEFÄLT, R., Accident management strategy in Sweden – implementation and verification *[Vattenfall AB, Vallingby, Sweden]*

Vol. 148 No. 2-3 (1994) 161-170
CORNILLE, Y., Accident management for French PWRs *[CEA, CEN, IPSN, Fontenay Aux Roses, France]*

Vol. 148 No. 2-3 (1994) 171-183
TUOMISTO, H., THEOFANOUS, T.G., A consistent approach to severe accident management *[Imatra Power Co., Vantaa, Finland; Univ. Calif. Santa Barbara, Santa Barbara, CA, USA]*

Vol. 148 No. 2-3 (1994) 185-203
HODGE, S.A., PETEK, M., Assessment of two BWR accident management strategies *[Oak Ridge Natl. Lab., Oak Ridge, TN, USA]*

Vol. 148 No. 2-3 (1994) 205-216
HUNT, C.E.L., COX, D.S., IGLESIAS, F.C., Fission-product release during accidents – an accident management perspective *[Atom Energy Canada Ltd. Res., Chalk River Nucl. Labs, Chalk River, Ontario, Canada; Ontario Hydro, Toronto, Ontario, Canada]*

Vol. 148 No. 2-3 (1994) 217-231
TUUNANEN, J., TUOMISTO, H., RAUSSI, P., Experimental and analytical studies of boric acid concentrations in a VVER-440 reactor during the long-term cooling period of loss-of-coolant accidents *[Imatra Power Co., Helsinki, Finland; Lappeenranta Univ. Technol., Lappeenranta, Finland; Tech. Res. Ctr. Finland, Lappeenranta, Finland]*

Vol. 148 No. 2-3 (1994) 233-252
HANSON, D.J., ARCIERI, W.C., WARD, L.W., Assessing information needs and instrument availability for a pressurized water reactor during severe accidents *[EG&G Idaho Inc., Idaho Natl. Engn. Lab., Idaho Falls, ID, USA]*

Vol. 148 No. 2-3 (1994) 253-271
OLANDER, D.R., Materials chemistry and transport modeling for severe accident analyses in light-water reactors. I. External cladding oxidation *[Lawrence Berkeley Lab., Berkeley, CA, USA; Univ. Calif. Berkeley, Berkeley, CA, USA]*

Vol. 148 No. 2-3 (1994) 273-292
OLANDER, D.R., Materials chemistry and transport modeling for severe accident analyses in light-water reactors. II. Gap processes and heat release *[Lawrence Berkeley Lab., Berkeley, CA, USA; Univ. Calif. Berkeley, Berkeley, CA, USA]*

Vol. 148 No. 2-3 (1994) 293-304
PASAMEHMETOGLU, K.O., UNAL, C., Heat transfer from a high temperature safety rod placed in a perforated guide tube and surrounded by an array of cold tubes *[Los Alamos Natl. Lab., Los Alamos, NM, USA]*

Vol. 148 No. 2-3 (1994) 305-316
DOROFEEV, S.B., KOCHURKO, A.S., EFIMENKO, A.A., CHAIVANOV, B.B., Evaluation of the hydrogen explosion hazard *[Russian Res. Ctr., Kurchatov Inst., Moscow, Russia]*

Vol. 148 No. 2-3 (1994) 317-326
GREENE, G.A., CHO, D.H., HYDER, M.L., ALLISON, D.K., ELLISON, P.G., Rapid quenching of molten lithium-aluminum jets in water *[Argonne Natl. Lab., Argonne, IL, USA; Brookhaven Natl. Lab., Upton, NY, USA; EG&G Idaho Inc., Idaho Natl. Engn. Lab., Idaho Falls, ID, USA; Westinghouse Savannah River Co., Aiken, SC, USA]*

Vol. 148 No. 2-3 (1994) 327-341
REMPE, J.L., WALKER, T.J., Overview of NRC sponsored LWR lower head failure research program *[EG&G Idaho Inc., Idaho Natl. Engn. Lab., Idaho Falls, ID, USA; US Nucl. Regulatory Commiss., Washington, DC, USA]*

Vol. 148 No. 2-3 (1994) 343-350
THINNES, G.L., KORTH, G.E., CHAVEZ, S.A., WALKER, T.J., High-temperature creep and tensile data for pressure vessel steels SA533B1 and SA508-CL2 *[EG&G Idaho Inc., Idaho Natl. Engn. Lab., Idaho Falls, ID, USA; US Nucl. Regulatory Commiss., Washington, DC, USA]*

Vol. 148 No. 2-3 (1994) 351-363
CHAVEZ, S.A., KORTH, G.E., HARPER, D.M., WALKER, T.J., High-temperature tensile and creep data for Inconel 600,304 stainless steel and SA106B carbon steel *[EG&G Idaho Inc., Idaho Natl. Engn. Lab., Idaho Falls, ID, USA; Off. Nucl. Regulatory Res., Washington, DC, USA]*

Vol. 148 No. 2-3 (1994) 365-383
REMPE, J.L., THINNES, G.L., CHAVEZ, S.A., A simpler approach for predicting LWR vessel failure during severe accident conditions *[EG&G Idaho Inc., Idaho Natl. Engn. Lab., Idaho Falls, ID, USA]*

Vol. 148 No. 2-3 (1994) 385-411
WITT, R.J., Local creep rupture failure modes on a corium-loaded lower head *[Univ. Wisconsin, Madison, WI, USA]*

Vol. 148 No. 2-3 (1994) 413-435
CHAVEZ, S.A., REMPE, J.L., Finite element analyses of a BWR vessel and penetration under severe accident conditions *[EG&G Idaho Inc., Idaho Natl. Engn. Lab., Idaho Falls, ID, USA]*

Vol. 148 No. 2-3 (1994) 437-453
KOCAMUSTAFAOGULLARI, G., HUANG, W.D., RAZI, J., Measurement and modeling of average void fraction, bubble size and interfacial area *[Univ. Wisconsin, Milwaukee, WI, USA]*

Vol. 148 No. 2-3 (1994) 455-462
VAN DE GRAAF, R., VAN DER HAGEN, T.H.J.J., MUDDE, R.F., Two-phase flow scaling laws for a simulated BWR assembly *[Delft Univ. Technol., Delft, Netherlands]*

Vol. 148 No. 2-3 (1994) 463-474
SADATOMI, M., KAWAHARA, A., SATO, Y., Flow redistribution due to void drift in two-phase flow in a multiple channel consisting of two subchannels *[Kumamoto Univ., Kumamoto, Japan]*

Vol. 148 No. 2-3 (1994) 475-486
HWANG, D.-H., CHANG, S.H., Development of a phenomenological model for the prediction of dryout locations under flooding-limited critical heat flux conditions *[Korea Adv. Inst. Sci. & Technol., Taejon, South Korea; Korea Atom Energy Res. Inst., Taejon, South Korea]*

Vol. 148 No. 2-3 (1994) 487-498
CHANG, S.H., LEE, Y.B., A new critical heat flux model for liquid metals under low heat flux-low flow conditions *[Korea Adv. Inst. Sci. & Technol., Taejon, South Korea]*

Vol. 148 No. 2-3 (1994) 499-507
BROCKMEIER, U., KOCH, M., UNGER, H., SCHÜTZ, W., Volatile fission product and sodium release from liquids *[KFA Jülich GmbH, Karlsruhe, Germany; Ruhr Univ. Bochum, Bochum, Germany]*

Vol. 148 No. 2-3 (1994) 509-513
HOUSNER, G.W., MASRI, S.F., Performance of the base-isolated USC University hospital under the 1994 Northridge earthquake *[Caltech, Pasadena, CA, USA; Univ. South Calif., Los Angeles, CA, USA]*

Vol. 148 No. 2-3 (1994) 515-520
PÁTEK, J., SIFNER, O., Fast calculations of the properties of superheated steam from the saturation curve up to 600 °C and 30 MPa *[Acad. Sci. Czech Rep., Inst. Thermomech., Prague, Czech Republic]*

Vol. 149 No. 1-3 (1994) 1-10
LEVY, S., The important role of thermal hydraulics in 50 years of nuclear power applications *[S. Levy Inc., Campbell, CA, USA]*

Vol. 149 No. 1-3 (1994) 11-15
BILICKI, Z., KESTIN, J., Reasons for the occurrence of spurious solutions in two-phase flow codes *[Brown Univ., Providence, RI, USA; Polish Acad. Sci., Inst. Fluid Flow Machinery, Gdansk, Poland]*

Vol. 149 No. 1-3 (1994) 17-28
BILICKI, Z., KESTIN, J., Critical flow and spurious solutions. Part I. The case of a single equation *[Brown Univ., Providence, RI, USA; Polish Acad. Sci., Inst. Fluid Flow Machinery, Gdansk, Poland]*

Vol. 149 No. 1-3 (1994) 29-36
BILICKI, Z., KESTIN, J., Critical flow and spurious solutions. Part II. The case of *N* equations *[Brown Univ., Providence, RI, USA; Polish Acad. Sci., Inst. Fluid Flow Machinery, Gdansk, Poland]*

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PARK, J.-W., DREW, D.A., LAHEY, R.T. (JR.), The measurement of void waves in bubbly two-phase flows *[Rensselaer Polytech. Inst., Troy, NY, USA]*

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